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A STUDY OF ADOPTIVE CHILDREN

- I. Interviews as a Source of Scores for Children and Their Homes
- II. The Predictive Validity of the Yale Developmental Examination of Infant Behavior
- III. Relationships Between Some Aspects of Development and Some Aspects of Environment for Adoptive Children

By

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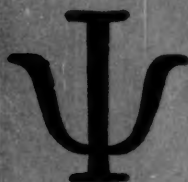
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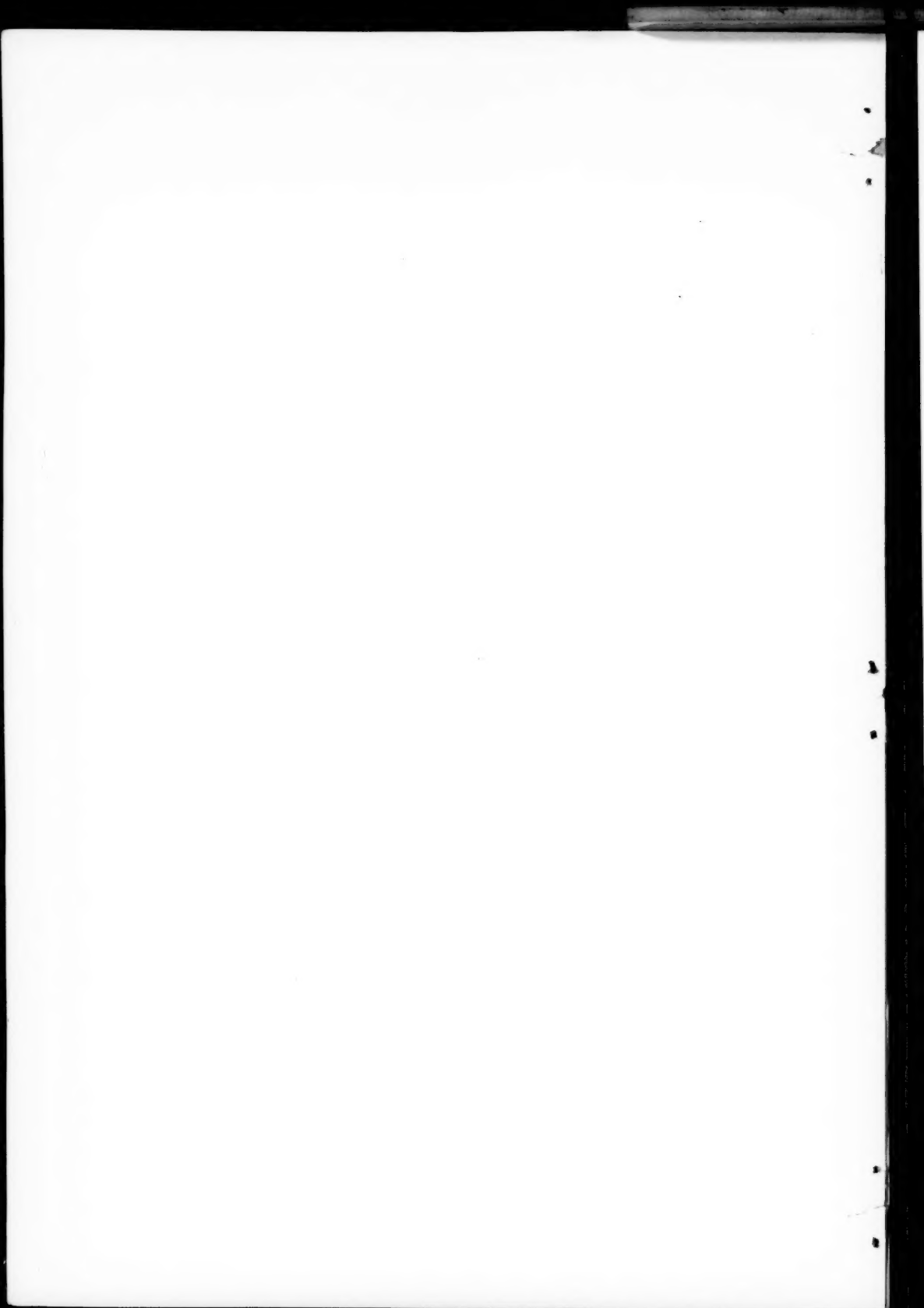
Vol. 70
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**A Study of Adoptive Children: I. Interviews
as a Source of Scores for Children
and Their Homes**

By

J. R. Wittenborn and Others

Rutgers University



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A Study of Adoptive Children: I. Interviews as a Source of Scores for Children and Their Homes¹

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INTRODUCTION

THIS REPORT has its origin in a much larger investigation of adoptive children. Our major investigation was a repeat or follow-up study of children who were examined in infancy at the Yale Clinic of Child Development.² In gen-

eral, our major study was concerned with two questions:

1. How accurately and in what respects can the Yale Developmental Examination of infant behavior (6)³ be employed to predict future development of adoptive children?

2. What characteristics of adoptive homes (placements) may be shown to be correlated with characteristics of adoptive children?

In order to answer these questions in as dependable a manner as possible, it was decided to use two samples of adoptive children. One sample included 114 children who were about five years of age at the time of our follow-up inquiry but who had not yet become involved in the work of the first grade. The second sample included 81 children who were past the first grade but were not yet pre-adolescent in their development.

It is obvious that a study of Questions 1 and 2 requires the employment of three classes of information: information emerging from the infant examination, information descriptive of the

¹The staff of the project wishes to express its appreciation to Dr. Donald Young, Director of the Russell Sage Foundation, and to Dr. Carl Hovland and Dr. Milton Senn of Yale University. The nature and the quality of this effort have been greatly influenced by such friends and advisers as Dr. Joseph Baldwin, Dr. Nancy Bayley, Dr. Harold Jones, Dr. Neal Miller, Dr. Robert Sears, and Dr. Helen Thompson. We are indebted also to Dr. Leonard Cottrell, Dr. Liselotte Fischer, Dr. Else Frenkel-Brunswik, Dr. Marjorie Honzik, Dr. Mary Cover Jones, Dr. Frederick Mosteller, and Dr. A. J. J. Van Woerkom. We are particularly grateful to the adoptive families who participated in this investigation, the child placement agencies who cooperated with us and guided our efforts, and to Adelaide Piscitelli, David Macklin, David Jenkins, and Peter Field who helped in the analysis of the data and the preparation of the manuscript.

²The Yale Clinic of Child Development (housed in the Institute of Human Relations, Yale University) is now known as the Yale Child Study Center.

³References for the present report are listed on page 58.

child's development at the time of our inquiry, and information descriptive of various facets of the child's environment. Measures for various facets of the infant examination procedure were available from the filed infant examination protocols. Satisfactory measures of the child's scholastic and mental development can readily be incorporated in almost any kind of follow-up study. The same may be said for certain gross aspects of physical development. Unfortunately, from the standpoint of personality development there were no convenient measuring devices for our children. Moreover, no convenient and satisfactory measuring devices were available for a bare description of the children's environment.

In this connection we emphasize the word "convenient"; rating and observational procedures are available for children, but they are too conspicuous, time-consuming, or demanding of the subject to lend themselves to the purposes of our investigation. Adoption is not casually regarded in our society, and the adoptive status of children and families is either a family secret or a tenderly regarded circumstance. As a consequence, follow-up examinations of adoptive children and parents must be conducted not only with the confidence and cooperation of the subjects but must be of such a nature as to offer no threat to the subject's peace of mind. It is obvious, therefore, that for our study repeated visits to the home, ratings in the school situation, and series of examinations were out of the question. Procedures for studying adoptive children must be particularly facile and inoffensive. The emphasis on speed and convenience was especially critical for us. Our adoptive families were widely scattered over Connecticut and, since in many cases the day available for examination was of necessity largely devoted to travel, our examination procedure had to be agreeably efficacious.

Our total approach to the investigation was such that we could arrange for two opportunities to get information descriptive of the home. One of these opportunities was the occasion of our social worker's visit to the home (at which time she indicated the nature of the cooperation we desired of the adoptive family and made provision for the mother and child to call at the Institute of Human Relations to participate in the follow-up examination for the child). Our second opportunity to acquire in-

formation came at the time of the child's examination. It was planned that a standard, semistructured interview would be conducted with the mother by one psychologist member of the staff while the psychological examinations of the child were being conducted by another staff member.

Incidentally, it was anticipated that the interview with the mother could be conducted in such a fashion as to produce much material descriptive of the child's personal development and general behavior, particularly as it is related to the home.

It appeared, therefore, that it would be possible for us to gather the kinds of information that would be essential to our investigation. Our problem then became one of how best to use such information in a convenient, dependable, and understandable form. In effect, our problem became one of *how to score an interview*.

We decided that a defensible scoring procedure would be possible if, during the course of the interview, answers to a standard set of questions were recorded. If such answers could be secured without explicitly asking the questions, presumably the answers would be little biased by the interviewee's possible awareness of our specific interests. If such answers (bits of information) could be recorded in standard form, possibly the material could be scored for several different modes of response or classes of information, e.g., in much the same fashion as personality questionnaires are scored. What was needed was a basis for scoring. It was decided that the basic scoring distinctions should emerge from the employment of a twofold criterion. Specifically, *bits of information could contribute to a given score if they were*

positively interrelated, and if they appeared to have a similar behavioral significance. In establishing the scoring procedure, each of the various bits of information emerging from the interview could be correlated with every other one, and clusters or groups of information could be defined by combining the bits of information which were positively correlated with each other. As a second step, bits of information so grouped could be scrutinized and any bit which in its behavioral significance seemed to be inconsistent with the group could be eliminated.

In this way, bits of information were assigned to groups so that all the bits comprising a group were positively interrelated and had similar behavioral implications. As a consequence, it became a simple matter to score the interview of a given person for each of the groups or clusters. A given person's score for any given group or cluster was simply the number of component bits of information which appeared in his interview record.

As an incidental methodological point, it should be noted that negative correlations were never a basis for including a bit of information in a group or cluster, and that all bits of information that did not show a larger number of significant correlations with the other bits than could be accounted for on the basis of chance alone were automatically excluded from further consideration.

We can discuss the principle of scoring interrelated bits of information in terms of its implications for the total score. Although evidence that the component bits are consistently interrelated is an incidental evidence that the total score may be reliable, this is not the sole or even the principal value of using inter-

related bits. It is possible that the principal value of scores that are built on consistently interrelated bits of information lies in the fact that the meaning of such scores is not likely to depend greatly upon the particular combination of items that happens to contribute to the total score for a particular individual. Scores based on bits of information that are known to be positively interrelated are preferable to scores based on bits of information combined on an a priori basis and without empirical evidence of internal consistency.

As an additional means of getting information relevant to the children's adjustment, an interview was planned for the children. Since more or less spontaneous and continuous discussion is often difficult with young children, no attempt was made to employ the semistructured interview with its avoidance of specific questions. Instead, a standard question-and-answer interview was planned for the children. It was hoped that such an interview (we called this a Social Reaction Interview) would provide useful information about the children's values and opinions of their own roles and reactions. The data from such an interview emerge in the form of numerous bits of information and lend themselves very well to a cluster-scoring procedure.

In the following sections the procedure for forming scores on the basis of interrelated bits will be applied in four different respects. In each instance the major application will be with our younger sample of children, but the results will be described also for our older sample. The respects in which we apply the cluster scoring principle may be briefly listed:

1. *Scores based on the Social Reaction Interview.* This interview was rigidly

structured and comprised a series of "What would you do if—" questions which a psychologist asked each child at the time of our follow-up study.

2. *Scores descriptive of the child based on the mother's Child-Rearing Practices Interview.* In our Child-Rearing Practices Interview with the mother a number of areas were introduced for discussion, but specific questions were generally avoided. Nevertheless, the interviewer sought and recorded specific bits of information descriptive of the child. These bits of information provided scores which described the child as seen by the mother, a very important descriptive feature of the adoptive child.

3. *Scores descriptive of the environment based on the mother's Child-Rearing Practices Interview.* Much of the psychologist's interview with the mother was descriptive of the psychological environment which the home provided for the child. This information, although not sought by explicit questioning, was recorded in standard form and provided the basis for a cluster-scoring procedure.

4. *Other scores descriptive of the home (Conditions of Child Rearing).* As a preparation for the visit of the mother and the child to the Institute of Human Relations, our social worker visited the home and on the basis of this visit gathered numerous bits of information in standard form. At the time the mother brought the child in for follow-up examination, the values and the organization of the home were the subject of discussion with the psychologist and additional bits of information were gathered in standard form. This body of information, emerging both from the social worker's visit and from the psychologist's interview, provided the basis for addi-

tional cluster scores which were primarily descriptive of the home, its organization and values.

SCORES BASED ON THE SOCIAL REACTION INTERVIEW

In Appendix A will be found a series of questions which ask the child what he would do in certain standard situations, for the most part situations familiar to him. The procedure was one wherein the question was asked by the examiner and the child's response was classified under the alternatives which had been set up during our preliminary pretesting work. The children responded to this series of questions with promptness and pleasure. It cannot be claimed that children's replies describe their behavior, but sensible and socially acceptable replies by a child indicate that he knows what society expects of him and that he is willing to say this in the context of the interview. There are numerous alternative responses to each question; some of them may have a wide and general acceptance as proper in our society. Presumably this procedure would reveal great differences, if they exist, in the children's system of values or ideas concerning appropriate behavior. Such verbalizations are not irrelevant. For example, most of the behavior difficulties that adults bring into the clinic and much of the psychotherapeutic procedure that is employed there concern how an individual feels he would or should react in common situations.

The Social Reaction Interviews for 100 children from our younger sample were reviewed and it was found that 111 response items occurred with sufficient frequency to justify further scrutiny. Accordingly, each of these items was correlated with every other one and the in-

tercorrelations were examined for clustering tendencies. As a result of such examination, several clusters of items with common behavioral implications were discernible. For the most part, items that have generally high correlations were excluded because of the difficulty of assigning them to any particular cluster; and items which are correlated with only one or two other items were excluded, because their relevance to any one cluster was not sufficiently general. (In addition, the reliability of such items, as inferred from the correlations, was questioned.) It should be emphasized that after the groupings of items were formed on the empirical basis of positive intercorrelations, the items were scrutinized from a rational standpoint and the intercorrelated items that did not plausibly go together (i.e., which could not be conceptualized as being evidence of a common form of behavior) were excluded from the clusters. Eventually it was possible to organize groups of items that were positively interrelated with each other, not importantly related with numerous items in another group, and that also had a plausible, common core of meaning or inferable behavioral relevance.

After such clusters were established for the younger sample, it was possible to score the Social Reaction questions for all of our children on the basis of each of these clusters. Such scores then would express the degree to which the kind of behavior implied by a cluster was characteristic of a child. Perhaps it is better to describe these scores as extensive scores rather than intensive scores. They do not imply how intense or severe any one response of a child may be, but instead indicate how general or pervasive a given kind of response

is for each child.

Tables 1 through 6 are descriptive of each of the clusters which were derived from the Social Reaction Interview with the younger children. These tables indicate the general nature of the items and also the degree to which the items in the various clusters are intercorrelated with each other. The interested reader may examine the meaning of the items more fully by referring to the Social Reaction questions in Appendix A. The intercorrelations among the various scales or cluster scores derived from the Social Reaction Interview are presented in Table 7.

The reader may question the nature of the cluster scores. The meaning of the cluster scores is an inference based upon the nature of the items which comprise the cluster. Perhaps each of these clusters may have a slightly different meaning for different readers. Although we attempt to verbalize our conceptualizations of these clusters in the paragraphs to follow, the reader is free to conceptualize them differently if he so desires. This feature is not unique to our cluster scores. People conceptualize the meaning of intelligence test scores differently, too. It should be noted that all of these intercorrelations are based upon a relatively small sample and are, of course, subject to the kinds of sampling fluctuation that ordinarily characterize such data. Accordingly, the reader should not hasten to ascribe some unique significance to the highest correlation, nor to feel that a zero or slightly negative correlation is necessarily contrary to the general implications of the positive interrelationships.

It may be suspected that we have built our clusters adventitiously on the basis of correlations that emerged largely as

the result of sampling factors, and that one should be most hesitant in accepting intercorrelations among these items as an evidence for their behavioral similarity. Actually, however, all the items that appear in our cluster scores showed many more large correlations with the other items in the Social Reaction Interview than reasonably could be anticipated on the basis of chance alone. As a matter of fact, the appearance of consistently interrelated bits of information is important evidence that the bits so interrelated are not combined on the basis of chance. Consistency and randomness simply do not go together.

Some of the clusters are of sufficient intrinsic interest to justify a few words of discussion. For example (see Table 1), *Dependence on Adults* is remarkable in that all of the items describe a similar type of response, although the various situations that motivate or cue the responses are seemingly different from each other. The consistency of this form of behavior or attitude is indicated by the positive intercorrelations among the items.

The cluster in Table 2, which we have called *Aggression*, comprises ten items which may be seen by many readers to have aggressive implications. It is quite possible, however, that other readers will be impressed with the general implication of strong will or insistence on carrying out one's own plan that is inherent in most of these responses. It seems in general, however, that more than stubbornness or strong will is implied by these items. For example, many of them imply a readiness to employ action that will be contrary to the wishes of others and possibly punitive in nature. In Table 2 we find a question mark in one of the cells; question marks will be found in several of the tables. These question marks are due to the fact that in some instances the marginal frequencies in our fourfold tables were of such a nature as to make the determination of the tetrachoric correlation coefficients quite uncertain (we used computing diagrams). Accordingly, we include a question mark in our table.

Although there are relatively high intercorrelations among the items comprising the cluster shown in Table 3, the term *Socialized Compliance* may not be equally agreeable to all readers. Some may see neatness in personal relations or avoidance of differences with others

as the underlying component in these responses. Still others may be inclined to say that the responses merely indicate a goody-good pattern of verbalization. Although these alternative interpretations may have merit, it seems that no great stretch of imagination is required to describe these various responses as involving compliance, on the verbal level at least, with some of the polite expectations for children in middle-class Western society.

The intercorrelations for the items comprising Table 4 are not uniformly high, but on the whole they indicate that there is some empirical similarity among them. It seemed to us, at least, that from a rational standpoint these items have something in common that involves doing the kind of thing that responsible adults might do in a child's view of adults. The responses imply a certain quality of concern with others which many fortunate children have known in the behavior of adults. We call this cluster *Taking an Adult Role*.

We have designated the cluster in Table 5 as *Weakness-Avoidance*. It is not very good from the empirical standpoint; some of the interrelationships could not be quantified because the marginal frequencies made the determination of the tetrachoric coefficients quite uncertain. In addition, there are several zero correlations. Nevertheless, it seems desirable to us to take this opportunity to form a score which might indicate weak, avoidant, hopeless, or futile attitudes on the part of a child.

The cluster in Table 6 provides a basis for a *Constructive Approach* variable. In its apparent implications it is similar to and empirically highly correlated with some of the other clusters, particularly the *Taking an Adult Role* cluster.

The intercorrelations among these various cluster scores are shown in Table 7. It is quite evident from Table 7 that, although they involve few overlapping items, these cluster scores are far from independent of each other. The most conspicuous evidence of relationship is the one between *Constructive Approach* and *Taking an Adult Role*. It appears that *Socialized Compliance*, *Constructive Approach*, and *Taking an Adult Role* are all fairly well intercorrelated. It is quite interesting to note that there is an inverse relationship between *Dependence on Adults* and *Aggression*, and that the correlations imply that

TABLE 2
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER, "AGGRESSION"
(Social Reaction Interview, Younger Sample; $N = 100$)

Response Number	Response Item	Frequency of Response	Response Number								
			3e	4e	5f	6a	7c	8a	8c	7f	8g
Aggression											
3e	Go anyway if father breaks promise to take him to circus	16	—								
4e	Get ice cream anyway if mother says he can't have it	18	.76	—							
5f	Tell child to leave if everyone plays with child and ignores him	12	.20	.15	—						
6a	Hit child back if he hits him	37	.50	.33	.20	—					
7c	Take back his toy if another child takes it	24	.26	.30	.17	.26	—				
8a	Hit child who calls him a bad name	14	.13	.47	.40	.42	.22	—			
8c	Say something bad to child who calls him a bad name	22	.20	-.12	.32	.40	.37	?	—		
Submission											
7f	Wouldn't go last if friends said his turn was last	11	.24	.20	.09	.11	.05	.10	.25	—	
8g	Get another friend if mother objected to one he likes	13	.41	.40	.10	.39	-.20	.38	.00	-.10 —	
Sympathy											
3f	Hit children if they hit another child	17	.04	-.01	.00	.38	.22	.25	.39	.03 .20	

* A "?" signifies that the frequencies of the two responses were such as to make the estimation of their coefficient quite uncertain.

Taking an Adult Role involves an aggressive attitude. Although these intercorrelations and the items that provide a basis for them are of intrinsic interest and will justify further discussions in some

later report, perhaps little more need be said about them at this time.

When confronted with a new scoring device or measuring procedure, one must not permit the interest of the content to

TABLE 3
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER, "SOCIALIZED COMPLIANCE"
(Social Reaction Interview, Younger Sample; $N = 100$)

Response Number	Response Item	% Frequency of Response	Response Number								
			2g	5a	1b	5b	7a	8c	9c	1f	7h
Aggression											
2g	Play with his own toys if other child won't let him play with his	26	—								
5a	Play alone if everyone plays with other child and not with him	12	.50	—							
Submission											
1b	Eat food he doesn't like	35	.00	.35	—						
5b	Give toy to other child if mother tells him to	47	.12	.42	.60	—					
7a	Go last if friends say his turn is last	31	.25	.41	.56	.63	—				
8c	Wouldn't play with child if mother tells him not to	37	.20	.32	.41	.54	.46	—			
9c	Play with someone else if other children won't let him play	17	.40	.32	.30	.30	.30	.37	—		
Sympathy											
1f	Help child who has hurt himself	40	.20	.15	.34	.40	.26	.35	.22	—	
7h	Assist or be quiet if mother is sick	31	.24	.04	.09	.50	.10	.34	.20	.40	—
Miscellaneous											
4i	Feel grown up if he were suddenly grown up	12	.12	.12	.50	.55	.03	.43	.32	.40	.63

TABLE 4
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"TAKING AN ADULT ROLE"
(Social Reaction Interview, Younger Sample; $N = 100$)

Response Number	Response Item	Frequency of Response	Response Number									
			8c	1f	3f	4e	6g	2b	1a	2a	1b	
Aggression 8c	Say something bad to child who calls him a bad name	22										
Sympathy 1f	Help child who has hurt himself	40	.44	—								
3f	Hit children who are hitting another child	17	.39	.60	—							
4e	Help child who is crying	25	.42	.52	.42	—						
6g	Fix toy or buy another if child breaks his toy	20	.19	.36	.33	.10	—					
Cleanliness 2b	Clean ice cream off clothes	56	.15	.24	.26	.16	.65	—				
Sex 1a	Tell girl to pull down dress	30	.47	.30	— .13	.30	.20	— .06	—			
2a	Tell boy to pull up pants	22	.23	.36	.04	.06	.28	— .10	.92	—		
Ethics 1b	Replace or fix something he breaks belonging to mother	27	.00	.25	.16	.03	.60	.52	.24	.20	—	
Miscellaneous 4i	Feel grown up if he were suddenly grown up	12	.35	.40	.33	.30	.40	.60	.31	.06	.37	

* A "?" signifies that the frequencies of the two responses were such as to make the estimation of their coefficient quite uncertain.

TABLE 5
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"WEAKNESS-AVOIDANCE"
(Social Reaction Interview, Younger Sample; $N = 100$)

Response Number	Response Item	Frequency of Response	Response Number									
			3b	4g	5b	2f	6d	2c	3b	1f	2g	
Aggression												
3b	Cry if father breaks promise to take him to circus	17	—									
4g	Cry if mother says he can't have ice cream	13	.80	—								
5b	Cry if everyone plays with another child and ignores him	12	.84	.78	—							
Sympathy												
2f	Avoid watching child get spanked	10	?*	-.09	?	—						
6d	Tell an adult if child breaks his toy	18	.14	.27	.30	.20	—					
Cleanliness												
2c	Tell an adult if ice cream gets on clothes	10	.11	.23	.28	.05	.62	—				
3b	Tell an adult if ball falls in garbage can	13	.54	.40	.20	.10	.40	.37	—			
Sex												
1f	Avoid little girl pulling up dress	10	?	?	-.05	.74	.04	-.20	-.09	—		
2g	Avoid little boy pulling down pants	14	?	?	?	.55	.08	-.10	-.20	.90	—	
Miscellaneous												
1b	Believe children hate animals and insects most	9	.30	.20	.24	.07	-.16	.41	.40	.04	-.07	

* A "?" signifies that the frequencies of the two responses were such as to make the estimation of their coefficient quite uncertain.

TABLE 6
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"CONSTRUCTIVE APPROACH"
(Social Reaction Interview, Younger Sample; $N=100$)

Response Number	Response Item	% Frequency of Response	Response Number							
			6c	7d	8d	2g	8g	9c	6g	2b 1b (Nudity)
Dependency 6c	Get another toy if his toy breaks	18	—							
7d	Look for another friend if his friend leaves	21	.27	—						
8d	Look after himself if he is hurt	20	.18	.21	—					
Aggression 2g	Play with his own toys if child won't let him play with his	26	.00	.43	-.03	—				
Submission 8g	Get another friend if mother says he can't play with someone he likes	13	.50	.44	.48	.10	—			
9c	Play with someone else if other children won't let him play with them	17	.14	.60	.31	.40	.53	—		
Sympathy 6g	Fix toy or buy another if child breaks his toy	20	.29	.50	.00	.09	.47	.20	—	
Cleanliness 2b	Clean ice cream off his clothes himself	56	.28	.20	.25	.35	.63	.15	.65	—
Nudity 1b	Ask mother later if she is taking a bath	23	.23	.33	.20	.20	.15	.01	.36	.18
Ethics 1b	Replace or fix something he breaks belonging to mother	27	.50	.50	-.05	.35	??	.46	.60	.52

* A "??" signifies that the frequency of the two responses were such as to make the estimation of their coefficient quite uncertain.

obscure the practical limitations that invariably accompany limited reliability. The most desirable evidence of reliability would be provided by an arrangement where each child was given the same interview by two different exami-

ners. This is difficult to provide under usual circumstances, and under the circumstances of our study it was impossible. Accordingly, we must be guided by estimates and indirect indications of possible reliability. As we have indicated,

TABLE 7
PRODUCT-MOMENT INTERCORRELATIONS AMONG CLUSTER SCORES
(Social Reaction Interview, Younger Sample; $N=114$)

Cluster	Split-half Reliability*	Cluster				
		1	2	3	4	5
1. Dependence on Adults	.88	—				
2. Aggression	.58	-.41	—			
3. Socialized Compliance	.70	.08	.14	—		
4. Taking an Adult Role	.69	-.18	.45	.53	—	
5. Weakness-Avoidance	.57	.35	-.31	-.07	-.33	—
6. Constructive Approach	.58	-.01	.31	.46	.63	-.23

* Based on an odd-even correlation corrected by the Spearman-Brown formula.

consistent intercorrelations among the component bits comprising the cluster score are an indication of reliability, and the principle of internal consistency can be concisely applied by determining a split-half reliability by the Spearman-Brown procedure. This, however, may give an estimate which is too low if the number of items is few and if the items are somewhat heterogeneous in nature. Nevertheless, we have determined such split-half reliabilities, and they are included in Table 7, which gives the intercorrelations among the various scores emerging from the Social Reaction procedure. High correlations with other independent scores can also be indications of reliability. (It will be noted, for example, that the Constructive Approach cluster score has a correlation which exceeds our estimate for its split-half reliability.) In general, it is apparent that some of these cluster scores may have a reliability that compares favorably with many of the devices in common use for the evaluation of children. Other cluster scores offer modest reassurance of their reliability, but even for them the indications of reliability are sufficiently favorable to justify the use of the cluster scores in exploratory investigations where one hopes to get some indication of the nature and the direction of relationship, but does not hope for a close approximation of the actual degree of relationship.

The questions comprising the Social Reaction Interview for the younger children and for the older children were somewhat different from each other; a principal difference was the addition of new questions to the Social Reaction Interview for the older children. Another source of difference for the Social Reaction Interview clusters was the change

in frequency of certain responses which seemingly accompanies change in age.

Changes due to age are well illustrated by a consideration of the *Dependence on Adult* cluster which was so conspicuous in our sample of younger children. In our younger group this cluster consisted of 18 items. In our older group, children mostly of eight or nine years of age, the frequency of these respective responses was so reduced that only four were sufficiently prevalent to justify their inclusion in the survey of the intercorrelations among the items of the Social Reaction Interview. When these four items were intercorrelated, they were found to bear minor positive relationships with each other. Although the implications of the *Dependence on Adult* cluster are somewhat similar for the two age groups, dependency on adults, as an attitude or point of view, obviously has less general descriptive significance for older children than for younger children. This is not surprising.

In our study of the Social Reaction Interview responses of five-year-old children, it was found that ten responses descriptive of rather simple *Aggression* were consistently interrelated and provided a basis for a cluster. These simple responses were relatively infrequent among the older children, however, and only one of them occurred with sufficient frequency to justify inclusion in our intercorrelations for the Social Reaction Interview. Since aggression in its simplest form is generally taboo in our society, it is not surprising that older and better socialized children would be reluctant to offer simple aggressive responses in the context of the Social Reaction Interview. Perhaps an additional factor which tends to suppress such responses is the kind of disciplinary control which is a part of the usual classroom situation, i.e., the classroom is possibly the earliest *generally* experienced situation wherein direct physical aggression among members of a group is uniformly tabooed and that taboo is enforced.

The trends for the *Socialized Compliance* cluster provide an interesting contrast with the trends discussed in the preceding paragraphs. The items that provide the basis for the *Socialized Compliance* cluster found for the younger children are more prevalent among the older sample than among the younger sample, and they tend to retain the pattern of positive interrelationships found for the younger children. The general tendency for a greater prevalence of the items of this cluster to be found among the responses for the older children is probably an expression of the specific learning and general socialization that tends to

characterize children as they increase in age; it may also be seen as a part of the general social developmental pattern which we have previously found expressed as a reduction of aggressive responses among the older children.

In our younger sample we found a cluster of ten items that we interpreted as an assumption of an *Adult Role* in the children's attitudes. In general, it appears that the intercorrelations among the items in question are low and inconsistent for the older sample (nevertheless, the suggested pattern of relationships within the cluster appears to be similar to the pattern for the younger sample).

In the younger sample ten items were found to be interrelated with sufficient consistency to result in our combining them into a cluster which we call *Weakness-Avoidance*. The responses that comprise this cluster are quite infrequent among our sample of older children, and only one of them was sufficiently prevalent to be included in our analysis for the older group.

A final cluster comprising ten items was found to be consistently interrelated in the responses from the younger children. The nature of these items was such as to result in our calling the cluster *Constructive Approach*. These items were more prevalent among the older children than among the group of younger children, but the correlations among these items were not consistent for the older sample.

The foregoing paragraphs provide a discussion of the manner in which the organization of social attitudes characteristic of younger children may have changed for older children. It is evident from our discussion that some patterns of reaction are of no descriptive value for older children because the component behavior is relatively infrequent. Other patterns of reaction descriptive of younger children lose their descriptive value because in the older children behavior may be organized differently than it is in the younger children.

Concepts that have descriptive value for one age may provide no descriptive economy for some other age. We find that in a study of responses of older children new concepts emerge with a descriptive value that may not be applicable to younger children. In Table 8, for example, we see a group of intercorrelations for seven responses which are consistently inter-

related and imply that some children are generally willing to give "Goody-Goody" responses to questions in the Social Reaction Interview. These very nice and obliging responses should not be confused with the overt behavior of the children in the respective situations. It should be noted that three of these responses are descriptive of school situations, but the formation of this cluster may not be due entirely to the availability of new types of items for older children. Five of the items were available for the younger children, but the responses of the younger children were not systematically related in the respects implied by these responses from the older children. Thus there appears a new pattern of response that could not have been anticipated from the responses of younger children. The *Goody-Goody* cluster is reminiscent of the *Socialized Compliance* cluster and probably has a similar general meaning. A possible difference between the two would emphasize the compliant features of the *Socialized Compliance* cluster for the five-year-olds and the "plausible" features of the *Goody-Goody* cluster for the older children.

Eight responses, considered descriptive of a generally *Responsible Attitude*, were positively intercorrelated for the sample of older children (Table 9). This *Responsible Attitude* cluster for the older children has an implication quite similar to the *Constructive Approach* cluster for the younger children. Despite their common implications, these clusters for the younger sample and for the older sample have but three common items. If one were inclined to infer that these two clusters were descriptive of the same kind of drive in the two samples, i.e., a drive to react constructively to the values and needs of one's associates, we would say also that the behavior appropriate for the expression of this drive is different for children who differ in age. Although this interpretation is plausible enough, the degree of overlap between the *Constructive Approach* cluster for the younger children and the *Responsible Attitude* cluster for the older children is not sufficient for us to be confident that a common drive pattern is implicit. We can only say that although the two sets of responses are different from each other, they appear to have a highly similar social role.

Ten of the items for the older sample are sufficiently interrelated statistically and sufficiently consistent in their meaning to result in our setting them aside as a *Cooperation with Authority* cluster (Table 10). Four of these items appeared in the *Socialized Compliance* cluster which was found for the younger children. The content of two of the items is unique to the Social Reaction Interview procedure for the older sample and could not have appeared in

TABLE 8
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER
"GOODY-GOODY"
(Social Reaction Interview,* Older Sample; $N = 50$)

Response Number	Response Item	% Frequency of Response	Response Number					
			2f	1a	2a	3b	3a	6c
Sympathy 2f	Avoid watching child get spanked	22	—					
Sex 1a	Tell girl to pull down dress	41	.34	—				
2a	Tell boy to pull up pants	41	.34	.85	—			
3b	Say "no" if man offers a present to go in his car	82	.29	-.05	-.15	—		
School 3a	Explain circumstances if he got to school late	49	.06	.25	.25	.36	—	
6c	Be quiet if teacher wants everyone to be quiet	56	.24	.20	.33	.38	.10	—
Miscellaneous 5a, b	Mother or father is person he thinks he is most like	27	.30	.30	.30	.23	-.03	.37

* The Social Reaction form included in the Appendix is the one used with the younger children. The form employed with the older children was identical except that it included a few additional items.

TABLE 9
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"RESPONSIBLE ATTITUDE"
(Social Reaction Interview,* Older Sample; $N = 50$)

Response Number	Response Item	% Frequency of Response	Response Number						
			1f	6g	2b	3a	1b	4e	9a
Sympathy 1f	Help child who has hurt himself	74							
6g	Fix toy or buy another if child breaks his toy	58	.50	—					
Cleanliness 2b	Clean ice cream off clothes	76	.34	.23	—				
3a	Get ball out of garbage can if it falls in	61	.15	.04	.30	—			
Ethics 1b	Replace or fix something he breaks belonging to mother	54	.30	.24	.40	.45	—		
4e	Replace broken window if broken while playing ball	58	.45	.08	.00	.43	.64	—	
School 9a	Pick up coat if someone knocks it on floor	50	.38	.20	.00	-.16	.31	.25	—
Assertion 2a	Would volunteer if teacher asked someone to lead the class	47	.02	.30	.10	.22	-.09	.12	.27

* The Social Reaction form included in the Appendix is the one used with the younger children. The form employed with older children was identical except that it included a few additional items.

TABLE 10
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"COOPERATION WITH AUTHORITY"
(Social Reaction Interview,* Older Sample; $N=50$)

Response Number	Response Item	Frequency of Response	Response Number							
			3a	5a	5b	7a	8c	9a	1c	1b 4a (School)
Aggression 3a	Remind father if he promised to take him to circus and then didn't	18	—							
5a	Play by himself if child visited his house and everybody played with this child and not him	20	.18	—						
Submission 5b	Give toy to other child if mother tells him to	76	.48	-.14	—					
7a	Go last if friends say his turn is last	77	.15	.34	.42	—				
8c	Not play with child if mother says not to	61	.20	.47	.05	.25	—			
9a	Not play with other children if they say he can't	33	.30	-.05	.27	.55	.50	—		
Toilet 1c	Tell adult if child wets his pants	35	.26	-.10	2**	.47	.33	.10	—	
Nudity 1b	Ask mother later if she is taking a bath	55	-.08	.27	-.06	.22	.23	.34	.25	—
School 4a	Tell teacher if a child scribbles on his paper	74	-.04	.40	.25	.10	.37	.32	.26	.33
Assertion 4a	Tell policeman if he is in a strange place and can't find mother	52	.45	.15	.20	.00	.57	.34	.13	.20

* The Social Reaction form included in the Appendix is the one used with the younger children. The form employed with the older children was identical except that it included a few additional items.

** A "2" signifies that the frequencies of the two responses were such as to make the estimation of their coefficient quite uncertain.

the cluster for the younger children. Thus it appears that the *Cooperation with Authority* cluster that we have found for our older sample could be related to the *Socialized Compliance* cluster found for our younger children. The general implications are similar; there is a marked overlap of content, and the differences for the most part may be related to differences in age.

We see that differences in age appear to result in both the disappearance of responses that provide a useful frame of reference for younger children and the appearance of new patterns of responses which are descriptively relevant for the older group. This shift is not surprising and it would be of considerable interest to make sequential studies to illustrate the course of this change. At present, however, we merely see evidence for the change and can relate it to a differential availability and appropriateness of the forms of behavior involved in the Social Reaction Interview changes. The nature of the continuity, if any, and the cause of the change are not clear. Possibly the shift in response pattern is a result of changes in the availability of

the various forms of response; perhaps it is a result of differences in specifically taught values.

The differences between the clusters for our younger and older samples are of only incidental interest to us at present. We are primarily interested in the various clusters because they permit us to make rational distinctions among the children in our study. As was indicated in our discussion of the data for the younger children, each of the various bits of behavior that comprise the cluster is considered to be an indication of circumstances under which a given general class or form of behavior may occur. We desire to use the clusters as a basis for distinguishing among our children with respect to the number of different situations in which reactions that belong to a

given class characterize the child. Distinguishing among children on the basis of the number of different situations under which a class of reaction or form of behavior occurs is a way of measuring the pervasiveness or the generality of a given form of behavior. Accordingly, the clusters provide the basis for a kind of extensity scale; a high score on the scale simply means that the child shows the form of behavior implied by the cluster in numerous situations, a low score that the child is characterized by the implied form or class of behavior in relatively few situations.

Let us now summarize the differences in clusters for the two age samples. The fact that the younger sample differs from the older sample in ways that we would expect them to differ suggests that the differences may be largely due to differences in age, i.e., may reflect changes in age. Responses to the Social Reaction Interview indicate that *Dependence on Adults* is an unimportant basis for distinguishing between older children. It was also found that *Aggressive* attitudes are mentioned relatively infrequently by the older children. These clusters are not a part of our description of the older children. The *Socialized Compliance* cluster found for the younger children is also apparent for the older children. The data provided by the other children, however, provide evidence for a new cluster that is more descriptive of the older children than the *Socialized Compliance* cluster. This new cluster, called "Goody-Goody" has implications similar to those of the *Socialized Compliance* cluster. Accordingly, the *Goody-Goody* cluster will be employed in our analyses for the eight-year-olds and we shall not employ the *Socialized Compliance* cluster. The clusters indicative of *Taking an Adult Role* and indicative of *Weak-*

TABLE 11
PRODUCT-MOMENT INTERCORRELATIONS
AMONG CLUSTER SCORES
(Social Reaction Interview, Older Sample;
N = 81)

Cluster	Split-Half Reliability*	Cluster	
		1	2
1. Goody-Goody	.59	—	
2. Responsible Attitude	.52	.16	—
3. Cooperation with Authority	.41	.31	.24

* Based on an odd-even correlation corrected by the Spearman-Brown formula.

Avoidant reactions are not evident in the data for the older children and, accordingly, are dropped from our analysis of the older children. The *Constructive Approach* cluster is not apparent for the older children, but in the data for the older children there has emerged a new cluster that is similar in its implications.

This new cluster is called *Cooperation with Authority*, and it will be employed in our analysis for the older sample.

Thus we see that for the older sample of children three cluster scores may be drawn from the Social Reaction Interview: "Goody-Goody," *Responsible Attitude*, and *Cooperation with Authority*. For the cluster scores emerging for the older sample, questions of reliability arise as they did from our data provided by the younger sample. There is no satisfactory answer to these questions, but the criterion of internal consistency may be applied by inspecting the intercorrelations among the bits or items. We have provided split-half reliabilities in Table 11, which provides the intercorrelations among the cluster scores for the older sample.

SCORES DESCRIPTIVE OF THE CHILD BASED ON THE MOTHER'S CHILD-REARING PRACTICES INTERVIEW

A lengthy, semistructured interview was conducted with the mother concern-

ing her child-rearing practices. Although very few specific questions were asked by us during the course of this interview, a standard set of general topics was always introduced for discussion. Our interviewers (Ph.D.'s in psychology, trained in psychotherapeutic interviewing) were prepared with a standard set of questions (see Appendix B) which were not asked, but for which answers were sought and recorded during the course of the interview. In practice, the interview was guided and extended until all of the desired information emerged; whenever specific questions were necessary, they were reserved for the end of the interview. Much of the information had to do with the reactions of the child, including the reactions of the child to the mother, to associates, to himself; it also included his fears and problems (Appendix C). These items were utilized as a basis for evaluation of the child's personal or social development as seen by the adoptive mother. Although the data may not be accepted as a simple, direct description of the child's behavior per se, this evalu-

ative device is none the less relevant. After all, a very important phase of the child's personal and social development is that phase which is seen in the eyes of his mother.

Each of the clusters based on the *Child Rearing Practice Interview* comprises a relatively small number of items and in some cases there are several zero correlations. Here again the naming of the clusters is something of an arbitrary matter and the reader should feel quite free to interpret them differently.

The items that comprise Table 12 all refer to responses which frequently are described in clinical discussions as *Compulsive* responses; among these items the number of conspicuous positive interrelations is quite sufficient to encourage one to place them in a common group and to give some credence to the implied common behavioral feature.

In Table 13 the *Aggressive* cluster is seen to be made up of items that are for the most part not only highly interrelated but of items that are almost unmistakable in their implications. It seems

TABLE 12
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"COMPULSIVE REACTION"
(Child-Rearing Practices Interview with Mother, Younger Sample; $N = 100$)

Response Number	Response Item	% Frequency of Response	Response Number					
			B ₄	B ₅	B ₆	C ₁	C ₃	6
Feeding								
B ₄	Desires specific foods	45	—					
B ₅	Vomits easily	32	.50	—				
Toilet training								
B ₆	Is sporadically wet during night	48	.15	.19	—			
Cleanliness								
C ₁	Initiates washing	63	.25	.44	.11	—		
C ₃	Initiates change to clean clothes	58	.06	.33	.14	.64	—	
Nervous mannerisms								
6	Masturbates	34	.50	.24	.44	-.03	.02	—
9	Has rituals	15	.34	.14	.37	-.05	.27	.10

TABLE 13
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"AGGRESSIVE"
(Child-Rearing Practices Interview with Mother, Younger Sample; $N = 100$)

Response Number	Response Item	% Fre- quency of Response	Response Number					
			M ₂	M ₅	M ₆	C ₁	C ₂	C ₅
Aggression								
A. M ₂	Calls mother names when angry with her	63	—					
M ₅	Has temper tantrums when angry with mother	28	.43	—				
M ₆	Does spiteful things when angry with mother	34	.56	.47	—			
A. C ₁	Hits other children when angry with them	74	.27	.31	.34	—		
C ₂	Calls children names when angry with them	59	.40	.03	.28	.61	—	
C ₅	Has temper tantrums when angry with children	23	.51	.32	.50	.45	.58	—
C ₆	Does spiteful things when angry with children	26	.57	.31	.72	.39	.54	.60

unlikely that the naming of this cluster would be the basis for controversy.

In Table 14 the *Phobic* cluster comprises items that all describe fear or other types of anxiety or fearful responses. Although the pattern of intercorrelation is not perfectly consistent, it has sufficient consistency to encourage the belief that children differ with respect to the generality of their fears, and

that in many children fearfulness in one situation is associated with fearfulness in another.

In Table 15 the *Dependence* cluster comprises only four items, all of which have positive interrelations although they are low. The writer sees a common behavioral component in these items, however, and since they seemingly describe an aspect of children's behavior

TABLE 14
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"PHOBIC"
(Child-Rearing Practices Interview with Mother, Younger Sample; $N = 100$)

Response Number	Response Item	% Fre- quency of Response	Response Number						
			B ₂	B ₅	C ₁	11	12	14	15
Sleeping									
B ₂	Awakens easily	21	—						
B ₅	Has nightmares	48	.25	—					
C ₁	Is afraid of dark	33	.29	.42	—				
Nervous mannerisms									
11	Fears injury	10	.32	.03	.40	—			
12	Fears water or storms	24	.40	.11	.26	.53	—		
14	Fears animals	23	.50	.25	.30	.43	— .05	—	
15	Fears doctors	19	.24	.08	.26	.22	.05	.04	—
16	Has other fears	21	.38	.35	.60	.32	— .12	.33	.00

TABLE 15
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"DEPENDENCE"
(Child-Rearing Practices Interview with Mother, Younger Sample; $N=100$)

Response Number	Response Item	% Frequency of Response	Response Number		
			B1	B2	B3
Independence					
B1	Often requests help on tasks he can do	62	—		
B2	Often demands attention or affection	77	.27	—	
B3	Goes to parents for comfort in difficulties	68	.13	.32	—
B4	Goes to parents about quarrels with children	49	.30	.10	.40

that is of considerable practical importance to parents as well as to others, we are quite willing to include it in our analyses for whatever it is worth.

Table 16, *Suppression of Aggression*, may be interpreted differently by different readers. It will be regarded by some readers as quite similar in its implications to the *Weakness-Avoidance* cluster score which was described in our discussion of the *Social Reaction Interview*. Actually, however, this *Suppression of Aggression* cluster score does imply some important passive, dependent types of reaction which may often characterize children who do not show ordinary aggressive reactions, or at least tend to

avoid aggressive responses.

The intercorrelations among these cluster scores for the *Child Rearing Practices Interview* are shown in Table 17. Note that the split-half reliability estimates for these cluster scores are also included.

The psychologist's *Child Rearing Practices Interview* with the mothers of the older children was quite similar to the interviews with the mothers of the younger children. The essential nature of any difference was due to the presence of additional items of information in the interview of the mothers of the older children. In the following paragraphs we shall re-examine the clusters of items that

TABLE 16
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"SUPPRESSION OF AGGRESSION"
(Child-Rearing Practices Interview with Mother, Younger Sample; $N=100$)

Response Number	Response Item	% Frequency of Response	Response Number						
			B4	A6	B16	M4	M7	F7	C3
Independence									
B4	Goes to parents about quarrels with children	49	—						
Toilet training									
A6	Did not cry at start of toilet training	21	.46	—					
B16	Has cried after soiling at night	36	.35	-.26	—				
Aggression									
A. M4	Cries when angry with mother	60	.44	.23	-.07	—			
M7	Tries to control himself when angry with mother	23	.06	.37	-.03	.00	—		
A. F7	Tries to control himself when angry with father	31	.34	.50	-.10	-.03	.80	—	
A. C3	Cries when angry with children	59	.50	-.06	.33	.62	.21	.20	—
C4	Sulks or withdraws when angry with children	43	.60	.00	.43	.17	.25	.40	.43

TABLE 17
PRODUCT-MOMENT INTERCORRELATIONS AMONG CLUSTER SCORES
(Child-Rearing Practices Interview with Mother, Younger Sample; $N = 114$)

Cluster	Split-half Reliability*	Cluster			
		1	2	3	4
1. Compulsive	.52	—	—	—	—
2. Aggressive	.70	.35	—	—	—
3. Phobic	.57	.34	.28	—	—
4. Dependence	.71	.04	.17	.06	—
5. Suppression of Aggression	.36	-.11	-.09	-.21	.41

* Based on an odd-even correlation corrected by the Spearman-Brown formula.

were descriptive of the child and based on items from the younger group; we shall consider the manner in which the original clustering observed for the younger children obtains or fails to obtain in the data for the older children. It seems most likely that the descriptive principles (clusters) that were useful in evaluating our younger sample may be different from those most relevant for the older sample.

Let us begin with the seven items that form a cluster of *Compulsive* reactions for the younger sample of children. In general, it appears that these seven items may be slightly less descriptive of the older sample and the intercorrelations indicate that these compulsive items are not consistently related for the older group of children.

In Table 18 we find the intercorrelations for the seven items that comprise an *Aggressive*

cluster score for the older sample. The correlations for the older sample shown in Table 18 are positive and indicate that aggressive behavior as seen by the mothers is as consistent for the older children as it was for the younger children. It is noted that some of the aggressive reactions are reported less frequently for the older children than they were for the younger children.

Intercorrelations for *Phobic* items comprised a cluster in the data provided by the mothers of the younger children. The intercorrelations for the older children are less consistent in their implications than those provided for the younger children, however, and the *Phobic* cluster is not considered to be suitably descriptive for the older sample.

The *Dependence* items are less prevalent among the older children than they are among the younger children, nevertheless, they tend to be positively interrelated for the older group in a manner comparable with the younger group. It is not surprising, however, that the kind of dependent behavior that is described by mothers of the five-year-old children should be

TABLE 18
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"AGGRESSIVE"
(Child-Rearing Practices Interviews for Younger and Older Samples)

Parts of Child- Rearing Practices Form	Response Items Based on Cluster for Younger Children	Frequency of Response		Tetrachoric Correlations Based on Data for 50 Older Children					
		% of younger group ($N = 114$)	% of older group ($N = 81$)	M2	M5	M6	C1	C2	C5
Aggression									
AM2	Calls mother names when angry with her	63	43	—					
AM5	Has temper tantrums when angry with mother	28	10	.52	—				
AM6	Does spiteful things when angry with mother	34	23	.34	.30	—			
AC1	Hits other children when angry with them	74	73	.15	.01	.34	—		
AC2	Calls children names when angry with them	50	70	.57	.44	.20	.24	—	
AC5	Has temper tantrums when angry with children	23	23	.30	.72	.37	.23	.52	—
AC6	Does spiteful things when angry with children	26	22	.38	.41	.63	.32	.50	.40

TABLE 19
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"ANXIETY"
(Child-Rearing Practices Interview with Mother, Older Sample; $N = 50$)

Response Number	Response Item	Frequency of Response	Response Number								
			B4	B5	B1	B2	A5	B1	6	15	
Feeding B4 B5	Desires specific foods	29	—								
	Vomits easily	29	.36	—							
Independence B1	Often requests help on tasks he can do	42	.35	.35	—						
Sleeping B2	Awakens easily	23	— .07	.03	.11	—					
Sex A5	Participated in sex play with other child (before age of 6 years)	22	.33	.06	.23	.40	—				
Ethics B1	Often lies	37	.51	.45	.37	.30	.16	—			
Nervous mannerisms 6 15	Masturbates	19	.34	.15	.37	.08	.32	.10	—		
	Fears doctors	10	.19	.70	.52	.12	.13	.33	.20	—	
X (includes 2, 3, 4, 7, 8, 9, 10)	Has rituals or mannerisms	37	.51	.39	.43	.05	.48	.48	.28	.33	

somewhat less prevalent in the responses of mothers of the older children.

In the foregoing paragraphs we see that many of the forms of behavior that are descriptive of the younger children are somewhat less conspicuous in the older children. In addition, it is seen that with respect to some behavioral facets responses described by the mothers have a different organization for the older children. Consistencies that are evident for the younger children are rendered doubtful or obscure in the data provided by the older age groups.

The intercorrelations for the older group of children were scrutinized for plausible consistencies, and certain clusters emerged. In some instances the new clusters may have no parallel in our study of the data for the younger children, and in other instances they may be seen as a possible modification or extension of a pattern or response that characterizes the younger children.

In Table 19 we find that there is a consistent interrelationship among several

responses which may be considered as indicative of *Anxiety*. The appearance of this cluster in the data for the eight-year-old group and the appearance of the *Phobic* cluster in the data for the younger group provides an interesting contrast and suggests a trend that should receive further scrutiny. Specifically, it suggests that among younger children fears are generalized, so that the child who is fearful in one situation tends to be fearful in other situations. Among older children, however, specifiable fears tend to be less generalized; instead, there is a suggestion that anxiety-type responses (or at least responses that could be interpreted as indicative of anxiety) are generalized.

In Table 20 we find that the data provided by the older sample include 11 items that are consistently interrelated and that appear to have a common behavioral significance. Although these items were somewhat more prevalent among the younger children than among the older children, they were not as con-

TABLE 20
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"SPOILED CHILD,"
(Child-Rearing Practices Interview with Mother, Older Sample; $N=50$)

Response Number	Response Item	% Frequency of Response	Response Number									
			B ₁	B ₂	B ₃	M ₁	M ₄	M ₅	M ₁₂	F ₅	C ₃	A ₃
Independence												
A ₁	Often requests help on tasks he can do	42	—	—	—	—	—	—	—	—	—	—
B ₂	Often demands attention or affection	66	.50	—	—	—	—	—	—	—	—	—
B ₃	Goes to parents for comfort in difficulties	51	.23	.36	—	—	—	—	—	—	—	—
Aggression												
A-M ₁	Tries to strike mother when angry at her	11	.44	.19	.33	—	—	—	—	—	—	—
A-M ₄	Tries when angry at mother	71	.39	.39	.33	.10	—	—	—	—	—	—
A-M ₅	Defends himself when angry at mother	10	.28	.38	.02	.57	—	—	—	—	—	—
A-M ₁₂	Defends himself by counter-accusations when angry at mother	49	.35	.45	.13	.07	.52	.35	—	—	—	—
A-F ₅	Cries when angry at father	60	.23	.35	.27	.48	.87	.37	.32	.68	—	—
A-C ₃	Cries when angry at children	64	.01	.34	.42	.30	.41	.08	.05	—	—	—
Cleanliness												
A ₃	Played with feces	24	.08	.20	.38	.06	.30	.26	.35	.20	.23	—
Nervous mannerisms												
6	Masturbates	19	.37	.38	.20	.85	.42	.19	.11	.50	.40	-.07

sistently organized among the younger children. All of these items could be descriptive of what the layman refers to as a "Spoiled Child." The appearance of this cluster indicates important differences among parents. Although the cluster itself can be used to describe children, the behavior of the child for the most part has a particular relevance for the parents. These responses could be seen, in general, as descriptive of aggression in one form or another directed toward the parent, and they imply that some parents are conspicuously unable to reduce this aggressive drive or to divert it in some satisfactory manner.

In Table 21 we find the intercorrelations for 11 items that were not consistently interrelated for the younger children but that are quite consistent in their relationship for the older children. These items refer to the early reactions of the child to his excretory functions, and to the later reaction of the child to certain interpersonal situations. The underlying implication of these items, regardless of the chronological reference, appears to be *Control* of impulses both excretory and interpersonal.

In summary, the psychologist's interview with the mother concerning her child-rearing practices indicated that the responses of children in the older group were organized differently from the responses in the younger group. As a consequence, certain differences in the cluster scores will be employed in our analyses for the older children. The *Compulsive* cluster that characterized the younger children did not characterize the older children. The *Aggressive* responses form a conspicuous cluster for both groups of children, and, accordingly, will be employed in our analyses for the older children. The *Phobic* cluster for the younger children is not apparent in

TABLE 21
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"CONTROL"
(Child-Rearing Practices Interview with Mother, Older Sample; N=50)

Response Number	Response Item	% Frequency of Response	Response Number									
			A17	B2	B3	B5	B6	B12	B13	B14	Cr	C3
Independence												
A17	Assists in entertainment of guests	67	—									
Toilet												
B2	Usually dry all day before age of 24 months	40	.30	—								
B3	Usually dry all night before age of 36 months	55	.07	.62	—							
B5	Usually dry all night before age of 36 months	75	.26	.40	.55	—						
B6	Ceased to have sporadic accidents during day before 5 years	73	.40	.22	.75	.61	—					
Aggression												
B12	Rarely shows anger toward mother	55	.42	.20	.36	.57	.14	—				
B13	Rarely shows anger toward father	73	.39	.29	.24	.50	.24	.81	—			
B14	Rarely shows anger toward other children	45	.54	.33	.33	.58	.25	.71	.55	—		
Cleanliness												
C1	Initiates washing procedures	66	.20	.40	.44	.12	.23	.50	.38	.22	—	
C3	Initiates change to clean clothes	61	.53	.35	.35	.55	.10	.41	.48	.03	.73	—
D5	Uses knife properly for cutting food	47	.04	.08	.55	.22	.21	.45	.12	.25	.28	.15

the behavior described for the older children; there emerges a somewhat related cluster which we shall employ as a basis for an *Anxiety* cluster score. Although *Dependence* items seem less characteristic among the older children than among the younger children, we shall retain the *Dependence* cluster and use it in our analyses for the older group. A *Suppression of Aggression* cluster appears to have no counterpart for the older sample. In addition to the *Anxiety* cluster, other new clusters emerge for the older group and will be employed in our analyses. Among these are the *Spoiled Child* cluster and the *Control* cluster. In analyzing the data for the older children we found the *Aggression* items and the *Anxious* items to be very consistently interrelated (as were the *Aggressive* items and the *Phobic* items for the younger children). We shall combine the *Aggressive* and *Anxious* items to form an *Anxious-Aggressive* cluster and shall conduct some of our analyses with scores based on this particular cluster.

In the foregoing discussion of the *Child-Rearing Practices Interview* data, we have described interrelationships among items of information that were descriptive of the child but were provided by the mother in a semistructured interview situation. Scores based on these clusters cannot be taken as a literal description of the children; instead, they are a description of the children as reported by the mothers. Since they are based on consistent interrelationships, it cannot be claimed that they are capriciously determined and have no general significance. It is possible that to some degree they describe stereotyped attitudes of adoptive mothers toward their children; it seems probable, however, that they also describe stereotyped aspects of the child's reaction as seen by

TABLE 22
PRODUCT-MOMENT INTERCORRELATIONS AMONG CLUSTER SCORES
(Child-Rearing Practices Interview with Mother, Older Sample; $N=81$)

Cluster	Split-half Reliability*	Correlation with Age at Follow-up	Cluster			
			1	2	3	4
1. Aggressive	.64	-.40	—			
2. Anxiety	.56	-.32	.57	—		
3. Dependence	.60	-.27	.18	.26	—	
4. Spoiled Child	.78	-.35	.46	.42	.68	—
5. Control	.78	.23	-.35	-.36	.11	-.15

* Based on an odd-even correlation corrected by the Spearman-Brown formula.

the adoptive mother. Since the behavior of the child as seen by the mother is no less important to us than the behavior of the child per se, the fact that mothers' attitudes or patterns of thinking are involved to some unknown degree in these clusters does not detract from our interest in them or from their relevance to our purposes. It is important, however, that the reader not overlook the fact that we are describing for the child patterns of behavior as they emerge from the interviews with mothers, and that these patterns of described behavior cannot be divorced from patterns of thinking on the part of the mothers.

In Table 22 the reader will find intercorrelations for various cluster scores that are used in our analyses for the older children. Although these correlations are not especially high (we would not be justified in considering the various clusters separately if they were), the nature and the direction of these correlations is plausible and does not detract from our interpretation of the clusters. Since the older group is somewhat more heterogeneous with respect to age than the younger group and since we consider some of the clusters to have a particular relevance to the age of the child, e.g., our data suggest that the very nature of the cluster may be a function of the child's age, the correlations between the cluster scores

and the age of the children at the time of follow-up have been included in Table 22. It will be noted that the most conspicuous correlations are the negative ones relating certain asocial or aggressive behavior on the part of the child with the age of the child. The implication that broadly generalized aggression may be less characteristic of older children than it is of younger children is not only consistent with inferences we draw from our survey of cluster changes, but is also consistent with kinds of changes that are observed to reflect the values of our society.

SCORES DESCRIPTIVE OF THE ENVIRONMENT BASED ON THE MOTHER'S CHILD-REARING PRACTICES INTERVIEW

After our first direct contact with the mother, made by our social worker, the mother and the child later came to our offices. During most of this call, one of the psychologists worked with the child while another psychologist talked with the mother. The interview with the mother usually began with a discussion of child-rearing practices. In general, topics of conversation were introduced in a standard sequence, but the questions for which we sought answers were so clear in our minds that we recognized relevant information regardless of the order in which it was presented. (As the

reader may have anticipated, the interviewing procedures and other data-gathering techniques that we have employed were developed through a rather lengthy series of preliminary explorations and pretestings. In the preliminary work we used children from nursery schools and cooperating parents as subjects. Throughout the course of our data-gathering period we had frequent staff meetings wherein we presented and evaluated all the data for a given child. In this way we established and maintained a high degree of uniformity in our techniques and judgments. As the reader may have noted, the nature of our procedure for forming clusters is such that items which were infrequent, poorly defined, or inaccurately observed dropped out, i.e., could not yield a pattern of correlation which would lead to their inclusion in a cluster.)

Much of the information concerning the adoptive family's child-rearing practices was combined to form cluster scores in the same manner as some of the Social Reaction Interview material from the children was combined to form cluster scores. The procedure was to intercorrelate the numerous available bits of information concerning the child-rearing practices of the adoptive home, to scrutinize these intercorrelations in order to select out relatively discrete clusters of items, and then to refine these empirical clusterings on the basis of rational considerations. As a consequence, the items remaining in any cluster are not only positively related with each other and relatively independent of items belonging in some other cluster, but they all imply some common circumstance or common policy or have a common behavioral implication.

The nature of the cluster scores that we derived from the bits of *Child-Rearing Practices Interview* information may

be examined by referral to Tables 23 to 26. The selection of items for original intercorrelation was based on frequency of response. Bits of information that occurred very infrequently in our sample or which characterized all the families were excluded at the outset because they obviously could provide no useful basis for distinctions.

In examining the intercorrelations of the items which comprise the various clusters, the reader should remember that each of these correlations is a sampling statistic and, accordingly, is subject to sampling variation. The amount of variation that should be expected among tetrachoric correlation coefficients is greater than that expected for Pearson r 's. The present tetrachoric coefficients were determined by an employment of computing diagrams. In brief, the reader is advised not to ascribe any particular significance to uniquely high correlations nor to become impressed with the occasional zero or insignificantly small negative correlation coefficients.

Since the labeling of these cluster scores is a discretionary matter and depends not only on the writers' interpretation of the implications of the clusters but also on their choice of words to represent their interpretation or inference, the reader is urged to scrutinize the items comprising the clusters and to draw his own inference concerning their possible behavioral implications. Nevertheless, the writers feel that the variation in home environments, particularly with respect to the role a child may play and the models of behavior provided for him, are expressed to an important degree by the implications that inhere in the clusters that accompany the present discussion. For example, Cluster A, which is called *Eagerness*, might very well be described differently. Nevertheless, the writers see in the items gathered together

TABLE 23
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER A,
"EAGERNESS"
(Child-Rearing Practices Interview with Mother, Younger Sample; $N = 100$)

Response Number	Response Item	Frequency of Response	Response Number						
			A1	A2	A7 (Independence)	Da	A7 (Toilet)	A8	B10
Feeding									
A1	Infant was awakened for bottle feeding	17	—						
A2	Hungry infant was required to wait for scheduled bottle	36	.72	—					
Independence									
A7	Child does not play outdoors without adult supervision	49	.56	-.07	—				
Da	Child is repeatedly warned to avoid harmful situations	38	.53	.16	.48	—			
Toilet training									
A7	Toilet training was interrupted after it was begun	18	.66	.42	.05	.00	—		
Aggression									
A8	Mother gives in when child is angry with her	11	.21	-.15	.15	.40	.47	—	
B10	Parents reason with child about aggression	65	.34	.48	-.10	.24	.14	-.02	—
Sex training									
A3	Child has frequently observed unclothed adults	35	.31	.43	.17	.12	.35	.02	-.05

in Table 23 a common feature that has to do with a more than usual concern on the part of the mother for the child's development and training. It seems that, within the means available to all mothers, the ones who are characterized by these items have sought to do whatever they could to carry out their responsibility for the child and to take whatever steps are necessary for the safety and physical and spiritual peace of the child, even though it may come at the mother's expense. Perhaps the eighth item in this cluster may be viewed as paradoxical, yet the writers feel that this item may be seen to have a place in this cluster; possibly parents who can live out a whole-hearted concern for the child's well-being are not likely to desire to hide or conceal themselves from the child. Perhaps this interpretation is farfetched and uncalled for; nevertheless, the intercorrelations tend to support it.

Cluster B1 (Table 24) is described as comprising practices that reveal a lack of sympathy on the part of the parents.

This is called an *Unsympathetic Parent* cluster. The items suggest that some parents seemingly cannot in general understand or feel the child's hopes, pains, or frustrations, or at least that some parents are in general unconcerned with these experiences of a child, or perhaps choose to act as if such things did not exist. At one time we were inclined to call this the Spartan constellation of child-rearing practices; there is no indication that parents who show these positively intercorrelated items yield out of consideration for the child's feelings. This group of responses appears to indicate a rather inflexible child-training attitude on the part of the parents. One wonders how much frustration on the part of the child is involved. Cluster B1 was seen to comprise several parts which in view of some beliefs could have different implications for the development of the child's character. Several of the items included in Cluster B1 have to do with toilet training. Since *Severe Toilet Training* is currently given a rather cherished position

TABLE 24
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER B,
"UNSYMPATHETIC PARENT"
(Child-Rearing Practices Interview with Mother, Younger Sample; N = 100)

Response Number	Response Item	% Frequency Response	Response Number									
			D1c	D5	C1c	C2b, c	C3c	A4	C5	B1	D4 (Earlier)	D4 (Now)
Feeding D1c D5	Child is coerced to eat	38	—	—	—	—	—	—	—	—	—	—
	Child wanted bottle at time it was discontinued	24	.11	—	—	—	—	—	—	—	—	—
Independence C1c C2b, c C3c	Child's pain is ignored or reproved	40	—	—	—	—	—	—	—	—	—	—
	Child is not soothed or reassured when lonely or afraid	33	.21	.58	.44	—	—	—	—	—	—	—
	Child is reproved for errors	37	.20	.34	.29	.41	—	—	—	—	—	—
Toilet training A4 C5	Child was kept on toilet at least 10 minutes in early toilet training	32	.37	—	.05	.10	—	—	—	—	—	—
	Child's messes were disgusting to mother	38	.32	.15	.20	.22	—	.37	—	—	—	—
Aggression B1	Child is spanked for aggression toward mother	56	.50	.13	.36	.44	.03	—	.38	—	—	—
Cleanliness D4 D4	Child learned to use fork at 5 years or earlier	11	.31	.41	.27	.41	.34	.30	.07	.37	—	—
	Child uses fork now	13	.39	.35	.48	.15	.40	.54	.38	.27	.7*	—
Sex training B	Child has received severe sex training	41	.30	.34	.04	.25	—	.00	.48	.20	.25	.32

* A "7" signifies that the frequencies of the two responses were such as to make the estimation of their coefficient quite uncertain.

TABLE 25
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER B₂,
"SEVERE TOILET TRAINING"
(Child-Rearing Practices Interview with Mother, Younger Sample; N = 100)

Response Number	Response Item	% Fre- quency of Response	Response Number				
			A ₃	A ₄	B ₈	B ₉	C ₅
Toilet training							
A ₃	Child was first placed on toilet at age of 1 year or earlier	.36	—				
A ₄	Child was kept on toilet at least 10 minutes in early toilet training	.32	.12	—			
B ₈	Child was ridiculed for soiling	.33	.09	.17	—		
B ₉	Child was hit for soiling	.34	.35	.16	.47	—	
C ₅	Child's messes were disgusting to mother	.38	.44	.37	.17	.31	—
Sex training							
B	Child has received severe sex training	.41	.23	.50	.32	-.07	.48

in developmental psychology, those items were set aside to provide the basis for a separate cluster. Accordingly, in our analyses we will handle Clusters B₁ and B₂ separately. Cluster B₁ indicates a generally unsympathetic, unfriendly attitude of child rearing and Cluster B₂ (Table 25) is specific with respect to rigidity in matters concerning toilet training.

Cluster C (Table 26) is rather an interesting cluster because it very likely is confounded with the mother's report of behavior of the child. Accordingly, in our analyses we shall have to regard with considerable caution the *Punishment for Aggression* cluster in the Child-Rearing Practices and the *Aggression* cluster from the same source. The interrelationship between these two clusters is not clear. One could be an artifact with respect to the other. It is interesting to observe, however, that the various items comprising this *Punishment for Aggression* cluster are rather highly intercorrelated. This suggests that with respect to the mother's attitude or behavior there is some consistency in this area; this certainly agrees well with our subjective im-

pressions based on interviews with the mothers. There are numerous mothers who will not tolerate aggressive expressions by their children in any form.

The intercorrelations for these various cluster scores are shown in Table 27. As we would expect, the scores based on the B₁ cluster (*Unsympathetic Parent*) are rather highly correlated with the *Severe Toilet Training* cluster score; they overlap somewhat in content. The rest of the cluster scores concerning the mother's child-rearing practices, however, are relatively independent of each other. The number of items comprising each of the clusters is modest, but for the most part the intercorrelations among items are sufficiently high to encourage us in our expectations that the measures of the Child-Rearing Practices which these cluster scores provide could prove useful to us in our analyses.

It is of interest to examine the data provided by the mothers of the older children and to compare the organization of their responses with the organization of the responses of the mothers of the younger children. The interviews with the mothers of the older children

TABLE 26
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER C,
"PUNISHMENT FOR AGGRESSION"
(Child-Rearing Practices Interview with Mother, Younger Sample; $N = 100$)

Response Number	Response Item	% Fre- quency of Response	Response Number					
			B1	B2	B3	B4	B5	B6
Aggression								
B1	Child is spanked for aggression to- ward mother	56	—					
B2	Child is reprimanded for aggression toward mother	70	.24	—				
B3	Child is deprived of privilege for ag- gression toward mother	63	.17	.29	—			
B4	Child is spanked for aggression to- ward father	37	.71	.24	.33	—		
B5	Child is reprimanded for aggression toward father	63	.31	.61	.40	.40	—	
B6	Child is deprived of privilege for ag- gression toward father	48	.26	.46	.81	.47	.61	—
B7	Child is spanked for aggression to- ward children	20	.53	.22	.33	— .04	.44	.20

included some information that was not available for the younger children. This fact, combined with the fact that in general parents treat older children somewhat differently from younger children, adds interest to our comparison and leads us to the expectation that the differences may contribute to our knowledge of child-rearing practices as they pertain to the age of the child.

The interviews with the mothers of the younger children had provided eight bits of information that were consistently

related and were judged by us to indicate an *Eagerness* on the part of the adoptive mother for many phases of child care. There is no indication of the existence of this cluster among the bits of information provided by the mothers of the older children, however. Some of the relevant information concerning feeding and toilet training could not be reliably produced by many of the mothers of the older children and as a consequence did not feature in our analysis. The remaining bits of information which had comprised the *Eagerness* cluster were not systematically interrelated in the data for the older children.

We find in the responses of the mothers of the older children, however, a cluster with similar implications. In Table 28 correlations are revealed for a number of items which are considered to be indicative of an overcontrolling attitude on the part of the mother. Since the *Overcontrolling* cluster for the older children has but one item of information in common with the eagerness cluster for the younger children we cannot

TABLE 27
PRODUCT-MOMENT INTERCORRELATIONS
AMONG CLUSTER SCORES
(Child-Rearing Practices Interview,
Younger Sample; $N = 114$)

Cluster	Split-half Reliability*	Cluster		
		1	2	3
1. Eagerness	.57	—		
2. Unsympathetic Parent	.44	-.02	—	
3. Severe Toilet Training	.44	-.01	.56	—
4. Punishment for Aggression	.78	-.05	.36	.23

* Based on an odd-even correlation corrected by the Spearman-Brown formula.

TABLE 28
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"OVER CONTROLLING"
(Child-Rearing Practices Interview with Mother, Older Sample; $N = 50$)

Response Number	Response Item	% Fre- quency of Response	Response Number					
			21a	B ₅	Da	C ₃	C ₅	B ₉
Independence								
A _{21a}	Mother gives in to child's repeated demands	32	—					
B ₅	Parent intervenes in child's quarrels with other children	34	.27	—				
Da	Child is repeatedly warned to avoid harmful situations	41	.04	.28	—			
Toilet								
C ₃	Mother looks at child's stool	15	.22	.60	.30	—		
C ₅	Child's messes disgusting to mother	27	.40	.38	.30	.48	—	
Aggression								
B ₉	Child is deprived of privileges for aggression toward children	30	.17	.29	-.03	.49	.32	—
Sleeping								
D ₄	Child has night light on	41	.25	.00	.08	.20	.37	.05

assume that they are identical or that they necessarily bear a sequential relation to each other. The similarity of their implication for the mother, however, is noteworthy.

In their interviews the mothers of the younger children had provided many bits of information that seemingly pointed toward an *Unsympathetic* reaction to the needs and problems of young children. In our sample of mothers of older children some of the bits were too infrequent to justify analysis.

The mothers of the younger children had also indicated in their responses that there were systematic differences among them with respect to the severity of toilet-training practices. The intercorrelated items of information that provided a *Severe Toilet Training* cluster for the younger children were found to be similarly interrelated in the information from the mothers of the older children (see Table 29). This systematic patterning of the responses of mothers with re-

spect to toilet training leads us to hope that major differences in toilet training may be studied for both the younger and the older children in our study.

In the responses of the mothers of the younger children we found indication that aggressive expression on the part of the children was generally tabooed by some of the mothers. Systematic differences in punishment for aggression were also revealed in the material supplied by the mothers of the older children. As a matter of fact, it seems possible that punishment for aggression may be more prevalent and more distinct for the mothers of the older children than for the mothers of the younger children. As illustrated in Table 30, certain additional bits of information are added to the *Punishment for Aggression* cluster in the data for our older group.

In Table 31 will be found the split-half reliabilities and intercorrelations of these cluster sources for the older sample.

TABLE 29
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"SEVERE TOILET TRAINING"
(Child-Rearing Practices Interview with Mother, Older Sample; $N=50$)

Response Number	Response Item	% Frequency of Response	Response Number				
			A ₃	A ₄	B ₈	B ₉	C ₅
Toilet							
A ₃	Child was first placed on toilet at age of 1 year or earlier	55	—				
A ₄	Child was kept on toilet at least 10 minutes in early toilet training	58	-.32	—			
B ₈	Child was ridiculed for soiling	22	.25	.29	—		
B ₉	Child was hit for soiling	19	.40	.40	.10	—	
C ₅	Child's messes were disgusting to mother	27	.32	-.05	.45	.30	—
Sex							
B	Child has received severe sex training	35	.26	.46	.30	.14	.48

OTHER SCORES DESCRIPTIVE OF THE HOME

In addition to the interview concerning child-rearing practices, the mother was interviewed also with respect to the general organization of the home, including its activities, values, recreations, and general pattern of living. The content of this interview was recorded on a form called the Conditions of Child Rearing; a sample of this is included in Appendix D. Another source of information descriptive of the home was provided by the use of a set of rating scales called the Multiple Rating Scale. The ratings were made by the psychologist as a result of the interview with the mother. A copy of this is included in Appendix E. The Multiple Rating Scale is of unusual interest because it is of such a nature as to be employed by both the social worker who visited the home and the psychologist who interviewed the mother. Accordingly, we have two sets of these ratings for each family. (As we shall see, these two sources of information covering a common phase of the home will be useful in our subsequent concern with a possible confounding between the nature of our findings and the source of our data.) In addition to the Multiple Rating Scale, the social worker

used a Home Rating Scale in recording her observations at the time of her visit to the home. Appendix F presents a copy of this scale.

These three forms—Conditions of Child Rearing, Multiple Rating Scale, and Home Rating Scale—provided bits of information descriptive of many important facets of the home other than child rearing per se, and accordingly were used as a basis for forming cluster scores descriptive of the home and its general atmosphere. (At some points we refer generically to these clusters as "Conditions of Child Rearing" cluster scores, although they obviously are not limited to the items included in the Conditions of Child Rearing form.) The procedure for forming these cluster scores is the one described for the other cluster scores: specifically, items for which responses occurred with inappropriate frequency were eliminated; the remaining items were intercorrelated, and those that showed fewer significant, positive correlations than might be expected on the basis of chance were eliminated. On the basis of inspection, relatively discrete clusters of interrelated items were formed; these clusters were further refined by excluding all items that seemed

TABLE 30
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
PUNISHMENT FOR AGGRESSION
(Child-Rearing Practices Interviews for Younger and Older Samples)

Parts of Child-Rearing Practices Form	Response Items Based on Cluster for Younger Children	Frequency of Response % of		Tetrachoric Correlations Based on Data for 50 Older Children									
		younger group (N=100)	older group (N=50)	B1	B2	B3	B4	B5	B6	B7	B8	C1a	C1c
Aggression	B1 Child is spanked for aggression toward mother	56	42	—	—	—	—	—	—	—	—	—	—
	B2 Child is reprimanded for aggression toward mother	70	54	.20	—	—	—	—	—	—	—	—	—
	B3 Child is deprived of privilege for aggression toward mother	67	20	.33	—	—	—	—	—	—	—	—	—
	B4 Child is spanked for aggression toward father	37	25	.75	.30	.62	—	—	—	—	—	—	—
	B5 Child is reprimanded for aggression toward father	63	77	.80	.60	.30	—	—	—	—	—	—	—
	B6 Child is deprived of privilege for aggression toward father	48	69	.15	.68	.92	.45	.70	—	—	—	—	—
	B7 Child is spanked for aggression toward children	20	13	.40	.16	.21	.04	.16	.12	—	—	—	—
Additional Response Items Based on Cluster for Older Children													
Toilet	B8 Child was ridiculed for soiling	33	22	.14	.42	.30	.25	.54	.28	.00	—	—	—
Aggression	C1a Parents spank child less now than in earlier years	—	68	.32	.31	.45	.28	.55	.63	.15	.20	—	—
	C1c Parents deprive child of privilege more now than in earlier years	—	59	.62	.26	.66	.35	.59	.77	.04	.18	.40	—

TABLE 31
PRODUCT-MOMENT INTERCORRELATIONS
AMONG CLUSTER SCORES
(Child-Rearing Practices Interview,
Older Sample; N=81)

Cluster	Split- half Reliability*	Cluster		
		1	2	3
1. Overcontrolling	.32	—	—	—
2. Severe Toilet Training	.45	.35	—	—
3. Punishment for Aggression	.82	-.04	.18	—
4. Unsympathetic Parent	.33	.18	.67	.04

* Based on an odd-even correlation corrected by the Spearman-Brown formula.

to be behaviorally inconsistent with the over-all implications of the group.

The items that have been gathered together to form Cluster D, *Ambition*, are seen to bear consistent positive relations with each other and seem to the writer to involve a respect for achievement (Table 32). It appears that evidences of interest in achievement of various types all tend to go together. Most of the types of achievement that we note here, however, have to do with a relatively high status in our social and economic structure.

Cluster E (Table 33) is called *Harmonious Family Relationships*. Its component items have positive intercorrelations and for the most part show that the members of a family may be congenial and enjoy each other's company in several respects. Some of the items appear twice in this cluster score depending on whether or not they are based on the social worker's observations or the psychologist's observations.⁴

⁴ For most items, the psychologist's ratings and the social worker's ratings are in good agreement, despite the fact that they were based on observations at both different times and places. Where there is evidence of disagreement, the social worker's ratings and the psychologist's ratings are handled as separate items.

TABLE 32
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER,
"AMBITION"
(Conditions of Child-Rearing Interview with Mother and the Multiple Rating Scale D,
Younger Sample; $N=100$)

Response Item	% Frequency of Response	Response Number									
		8a	13a	10a	21a	22a	23.4	23.5	23.11	23.15	23.16
Parts of Conditions of Child-Rearing Form											
8. Community service	25	—									
13. Need achievement	26	.87									
19. Culture (music)	45	.64	—								
21. Culture (literature)	16	.54	.50	.80	—						
22. Culture											
a. Parents frequently play musical instruments, paint or draw, etc.	17	.31	.72	.41	.54	—					
23. Recreation	20	.48	.29	.18	.36	.21					
a. One or both parents frequently travel on pleasure trips	11	.46	.44	.40	.39	.38	.44				
11. One or both parents collect non-art objects	8	.36	.50	.40	.18	.35	.20				
15. One or both parents frequently go to lectures	7	.58	.42	.15	.60	.42	.35	.55			
16. One or both parents frequently read	45	.44	.40	.42	.60	.24	.35	.27	.10	.35	—
Part of Multiple Rating Scale Form											
5. Flexibility of par- ents' expectations	8	.53	.34	.60	.39	.52	.10	.30	.42	.66	.40
a. Parents have fixed ideas about child's education and vocation											

TABLE 33
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER E,
"HARMONIOUS FAMILY RELATIONSHIPS"
(Conditions of Child-Rearing Interview with Mother and the Multiple Rating Scale,
Younger Sample; $N=100$)

Response Item	% Frequency of Response	Response Number						
		15a	24c	25c	26d	8a	6a*	7c*
Parts of Conditions of Child-Rearing Form								
15. Story telling	83	—						
24. Mother's original education- al and vocational aspirations	59	—	—					
25. Father's original educational and vocational aspirations	57	—	—	—				
26. Family Compatibility	39	.40	—	—	—			
a. Parents are compatible and harmonious								
Parts of Home Rating Scale Form								
8. Sociability (visitors)	49	.24	—	—	.32	—		
9. Family group recreation	62	.25	—	—	.53	.55	—	
a. Family enjoys group activities								
Parts of Multiple Rating Scale Form								
6. Mother of child	38	.26	—	—	.28	.03	.37	—
7. Mother's enjoyment of child	30	.55	—	—	.10	.31	.50	.41
7. Mother's reaction to child	48	.32	—	—	.27	.03	.34	.66
a. Mother is objective but favorable toward child (Social Worker)								
7. Mother's reaction to child	43	.24	—	—	.21	.31	.48	.55
a. Mother is objective but favorable toward child (Social Worker)								

* Psychologist.

† Social Worker.

Cluster F (Table 34) had been tentatively called a slovenliness cluster. Perhaps this is a harsh designation for this cluster and it probably implies more disapproval than the investigators actually feel. Accordingly, it is now designated as the *No Ambition* cluster. It is certain that these items neither imply the existence of success in any socially approved undertaking nor indicate any striving for such success. These are the kinds of things that customarily are not characteristic of the families and the homes that are respected in the community because of achievement or because of community responsibility.

Cluster G (Table 35) we have called *Rejection of Child*. Perhaps this designation may receive the least sympathy from the reader because "rejection of child" is a concept that has deteriorated with familiarity and to many people has become almost meaningless. Nevertheless, we find here a group of items that bear a rather impressive degree of positive interrelationship and that fail to indicate any friendliness toward the child or any enjoyment from the child's existence. It seems that all of these items tend to distinguish between parents in much the same way, and that the basis of this distinction has to do with the friendliness of the parent toward the child. One could say that the lack of friendliness is due to the mother's dislike of the child, or perhaps it indicates an inability for liking any child. At any rate, it would seem that the distinction which a score based on this cluster would provide could be related to our concept of rejection.

We have in Cluster H (Table 36) a group of items that are positively inter-related and that suggest to us that the parents may not enjoy each other's company, or at least that the parents may fail to experience a great deal of satisfaction

TABLE 34
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER
"No Ambition"
(Conditions of Child-Rearing Interview with Mother and Multiple Rating Scale,
Younger Sample; $N = 100$)

Response Item	% Frequency Response	Response Number									
		8c	11c	13c	18c	19c	21c	1c	2c	3c	
Parts of Conditions of Child-Rearing Form											
8. Community service	55	—	—	—	—	—	—	—	—	—	
c. Both parents are usually inactive in community affairs	10	.43	—	—	—	—	—	—	—	—	
c. Home schedule is poorly organized	17	.60	.26	—	—	—	—	—	—	—	
c. Both parents expend only as much effort as is required	17	.57	.27	.61	—	—	—	—	—	—	
c. Parents rarely or never listen to forums, news analysts, etc.	38	.77	.37	.35	.50	—	—	—	—	—	
c. Parents listen almost exclusively to popular music	38	.40	.45	.35	.50	—	—	—	—	—	
c. Parents read almost exclusively mysteries, comics, pulp magazines, etc.	20	.37	.48	.52	.40	.54	—	—	—	—	
Parts of Home Rating Scale Form											
1. Physical Plant	9	.54	.30	.30	.55	.55	.40	—	—	—	
c. Home does not meet physical need of child	10	.55	.27	.42	.30	.60	.35	.87	—	—	
c. Home has little or no play space	25	.74	.30	.50	.20	.50	.40	—	—	—	
3. Maintenance of Home	7	.44	.60	.41	.24	.35	.35	.71	.40	.47	
c. Neatness											

TABLE 35
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER G,
"REJECTION OF CHILD"
(Conditions of Child-Rearing Interview with Mother and the Multiple Rating Scale,
Younger Sample; $N = 100$)

Response Item		% Frequency Response	Response Number					
			9a	14a	16c	1b, c	3c*	6c, d†
Parts of Conditions of Child-Rearing Form								
9. Emotionality of mother	a. When angry, mother usually expresses her feelings without restraint	30	—					
14. Expressed disapproval of parents	a. Parents are very critical of child	19	.65	—				
16. Conversation between mother-child	c. Mother tends to discourage child from talking	17	.30	-.03	—			
Parts of Multiple Rating Scale Form								
1. Acceptance of child	b and c. Parents do not completely accept child as their own	32	.47	.37	.45	—		
2. Affectionateness of mother	c. Mother rarely fondles or kisses child (Psychologist)	19	.32	.40	.23	.50		
3. Affectionateness of child	c. Mother rarely fondles or kisses child (Social Worker)	16	.35	.27	.20	.31	.15	—
4. Mother's enjoyment of child	c and d. Mother shows little or no real enjoyment in child's behavior (Psychologist)		.48	.21	.27	.76	.22	.42
5. Mother's enjoyment of child	c and d. Mother shows little or no real enjoyment in child's behavior (Social Worker)							
6. Mother's reaction to child	a. Mother is critical of child, describing his behavior in uncomplimentary ways	22	.40	.24	.29	.85	.37	.45
7. Mother's reaction to child	a. Mother is critical of child, describing his behavior in uncomplimentary ways	13	.67	.41	.47	.75	.25	.75
								.70

* Psychologist.

† Social Worker.

or pleasure in each other's company. Perhaps the emphasis on pleasure in each other's company is unwarranted here and it may be a difference with respect to values other than purely social ones. At any rate, we have chosen to consider this a basis for a measure of *Parental Incompatibility* and we do this with full awareness that the term may be misleading to some of our readers. In every case, however, we encourage our readers to examine the items comprising each cluster and form their own inference concerning its possible meaning. Just as the meaning of a new intelligence test cannot be known until first the examiner familiarizes himself with the contents, the meaning of cluster scores cannot be known till the reader examines the bits of information that go together to form the cluster.

Cluster I (Table 37) is made up of five items which bear rather consistent positive interrelations with each other. Although the word *Overprotective* would seem to be justifiable in view of the nature of the items, perhaps some will feel that the cluster is a little pretentious inasmuch as it really involves only five bits of information that are based on but three different items. It should be noted, however, that the psychologist and the social worker have seen the mother under quite different conditions and, accordingly, their rating of the mother is not based on the same sample of behavior, i.e., the behavior was observed not only by two different people but it was observed in two different contexts. The fact that the social worker's and the psychologist's observations are not identical is indicated by the particular fact that they do not bear an exceptionally high correlation with each other. It is interesting (see Table 38) that the split-half estimates for reliability are relatively high for the

TABLE 36
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER H,
"PARENTAL INCOMPATIBILITY"
(Conditions of Child-Rearing Interview with Mother and the Multiple Rating Scale,
Younger Sample; $N = 100$)

Response Item		% Fre- quency of Response	Response Number			
			5c	24a	25a	26a, b
Parts of Conditions of Child-Rearing Form						
5. Parental contacts	c. Parents rarely spend leisure time together	15	—			
14. Mother's original educational and vocational aspirations	a. Mother's aspirations are markedly superior to present situation	7	—	—		
25. Father's original educational and vocational aspirations	a. Father's aspirations are markedly superior to present situation	11	—	—	—	
26. Family compatibility	a and b. Parents are very incompatible—may have considered divorce	11	.67	—	—	—
Parts of Home Rating Scale Form						
9. Family group recreation	c. Family rarely enjoys group activities	9	.65	—	—	.47

various cluster scores in this group, despite the fact that many of the cluster scores are based on items from different sources. It will be noted that in some instances a Multiple Rating item from the psychologist's interview and the same Multiple Rating item from the social

worker's visit are used as components of a given cluster score. Since the items obviously have a similar meaning and are positively correlated, it is reasonable that they should fall into the same cluster score. The items are not identical, however; they refer to behavior observed by

TABLE 37
TETRACHORIC INTERCORRELATIONS OF RESPONSE ITEMS IN THE CLUSTER I,
"OVERPROTECTIVENESS"
(Conditions of Child-Rearing Interview with Mother and the Multiple Rating Scale,
Younger Sample; $N = 100$)

Response Item		% Fre- quency of Response	Response Number			
			2a*	2a†	4d	7d*
Part of Multiple Rating Scale Form						
2. Solicitousness towards child	a. Mother is oversolicitous with child (Psychologist)	26	—			
2. Solicitousness towards child	a. Mother is oversolicitous with child (Social worker)	12	.27	—		
4. Accelerational attempt	d. Parent tries to maintain child's immaturity	13	.65	.28	—	
7. Mother's reaction to child	d. Mother has marked protective bias toward child's behavior (Psychologist)	14	.30	.07	.38	—
7. Mother's reaction to child	d. Mother has marked protective bias toward child's behavior (Social worker)	12	.27	.47	.44	.51

* Psychologist.

† Social Worker.

TABLE 38
PRODUCT-MOMENT INTERCORRELATIONS AMONG CLUSTER SCORES
(Child-Rearing Practices Interview, Younger Sample; $N=114$)

Cluster	Split-half Reliability*	Cluster				
		1	2	3	4	5
1. Ambition	.78	—				
2. Harmonious Family Relationships	.58	.03	—			
3. No ambition	.72	-.59	-.29	—		
4. Rejection	.76	.14	-.54	.10	—	
5. Parental Incompatibility	.73	.06	-.46	.32	.41	—
6. Overprotectiveness	.77	-.10	-.32	.19	-.01	.20

* Based on an odd-even correlation corrected by the Spearman-Brown formula.

two different persons on two different occasions and in two greatly different situations.

The Rejection cluster score comprised several parts of the Multiple Rating Scale form. Since the Multiple Rating Scale data were provided independently both by the social worker and by the psychologist, we decided to make a special check on the reliability of a "Limited" Rejection cluster score. We did this by forming for each child a Rejection cluster score based on the social worker's observations and a Rejection cluster score based on the psychologist's interview. Each of these partial scores comprised the ratings on Acceptance of the Child, Affectionateness of the Mother, and the Mother's Enjoyment of the Child. Obviously, a cluster score based on these few items would be greatly restricted in range; nevertheless, the respective restricted cluster scores correlated with each other to the order of .60. Since the type of information involved is somewhat judgmental in character and therefore not likely to yield the highest evidence of reliability, and since the basic observations were made under two greatly different conditions, we are inclined to consider this correlation of .60 as an indication that our cluster scores emerging from the various bits of information

probably have a useful degree of reliability.

The intercorrelations among the cluster scores are shown in Table 38. Some of these intercorrelations are of considerable interest. As we would anticipate, *Ambition* and *No Ambition* are inversely related. It is also of interest to observe that *Harmonious Family Relationships* is inversely related with our *Rejection of Child* cluster score, and that the *Rejection* cluster score is positively related with the measure of *Parental Incompatibility*. (This confirms the work of others [3,16].) To complete the discussion of these parts, *Parental Incompatibility* is seen to be inversely related with *Harmonious Family Relationships*. Thus we see that the patterns of intercorrelations among the cluster scores coming from observations made by different raters in different contexts are consistent with each other in their implications.

When we consider the respective data for the older sample, the cluster scores that emerge from the material summarized on the *Conditions of Child Rearing* form, *Multiple Rating Scale*, and *Home Rating Scale* (see Appendixes) are quite similar to those emerging for the younger sample. That is to say, the respective clusters are either highly similar in content or quite analogous in their impli-

cations. There is one conspicuous exception to the over-all similarity. The *Overprotectiveness* cluster that emerged in the data for the younger children was not discernible in our analyses for the older sample.

In our study of the children and of the children's environment we sought to employ observations and procedures that would afford the greatest possibility of revealing relationships between circumstances of the child's rearing and criteria of the child's follow-up development. We have been guided primarily by what we thought were both probable and important kinds of relationships. We have been guided also by what we thought were the most successful efforts of others, and in every case our efforts can be related to the efforts of others—observational, analytical, or theoretical. Perhaps we may sum up best by saying that we have sought here to use a sampling procedure. We have sought representative information for the kinds of experiences and circumstances which we (on the basis of the consensus of the beliefs of others, and our own experiences as well) suspected would be most important in determining or anticipating our criteria. In such an undertaking as this, failure for a certain relationship to appear cannot be offered as evidence that such a relationship does not exist.

Lack of apparent relationship can be due to many things: the use of unreliable variables, faulty interpretation of a theoretical position, untoward but unrecognized characteristics of the sample, etc. If, however, in more aspects of our analyses than could be predicted from chance alone we find important and plausible relationships, we are inclined to ascribe some significance to them and attempt to relate them to the over-all purposes of our study. Lest we be misunderstood,

however, it should be emphasized that we have not sought to sample or measure all of the kinds of environment which could conceivably be relevant. We have been limited by our obligation to the agencies, by the delicate nature of the status of adoptive children and adoptive families, by the time and material limitations imposed on any practicable piece of research, and by any biases of orientation that are based on our scrutiny of the published literature. Within these limitations we have not sought to measure intensively but in general have sought to measure extensively.

SUMMARY

Let us review and summarize the nature of our methodological problem.

1. We desired useful measures of several aspects of the social and emotional development of young children. It is possible to think of at least four major aspects of the child's emotional and social development. One aspect would comprise an objective description of the child's behavior. Another aspect would comprise a description of the child as he is regarded by his associates outside of the home. Another would be the mother's opinion of the child. And a fourth would be the child's opinion of himself. Unfortunately, the attitude of our society toward adoptive families, and adoptive children particularly, is such that it would be very difficult if not impossible to visit schools and playgrounds and observe adoptive children and learn about the opinions of others concerning them. As a matter of fact, getting such data for a widely scattered group of children would be very difficult under any circumstances. Accordingly, we had to restrict the content of our inquiry to the child's opinion of himself and to the mother's opinion of the child. It is ob-

vious, therefore, that we do not have anything that could be called a total study of the child's adjustment. Nevertheless, the child's opinion of his own behavior and what the mother thinks of the child's behavior are very practical factors in the child's personal adjustment.

2. We desired useful measures of several aspects of the physical and psychological environment of our children. We had but two opportunities to get such information. One opportunity came at the time of our social worker's visit to the home. This was her first and only visit and had as its ostensible purpose the arrangement of the adoptive family's visit to the Institute of Human Relations. Our second opportunity to learn about the home came at the time of the mother's visit to our offices; while the child was being examined, a semistructured interview was conducted with the mother concerning the home in general and its child-rearing practices in particular. It was in this informal clinical context that we were obliged to get systematic, quantifiable information concerning the home.

3. The financing and planning of our investigation was of such a nature that no provision could be made for a preliminary period of study wherein measuring devices could be constructed. In effect, our position was a paradoxical one where we were obliged to construct measuring devices during the course of our inquiry. The only alternative was one of greatly restricting the scope of the study so that practically no information concerning the personal and social development of the child and practically no information concerning the psychological environment of the home would be available. Rather than so impoverish our investigation, we applied the procedures

described in the present report.

4. Although we were confident that we could secure informational content relevant to the purpose of our investigation, we had the special problem of deciding how such content should be used. We were fearful that any a priori combination of information could be seriously misleading, and we were most desirous of using scores that had a meaning which could be empirically defended. Specifically, we were fearful that if the information were combined on some a priori basis to form scores, a given score might not have the meaning that had been ascribed to it. It was decided, therefore, that the most defensible score to use would be based on positively interrelated bits of information. Presumably such scores could have the same general meaning from individual to individual although the items comprising the identical scores of any two given individuals' scores might not be identical.

5. When one is using untried variables, one must have some assurance that the variables have a minimal useful reliability so that their use in exploratory investigation would not be doomed to failure from the start because of a total lack of reliability. It was our opinion that using positively interrelated bits of information as a basis for scoring would guarantee a certain minimal reliability. Specifically, consistently interrelated bits of information must themselves possess some essential reliability; otherwise they could not be so interrelated.

In the Appendixes one may find sets of forms that were used in order to provide standard records of the kinds of information that would be most relevant to our scoring purposes. In our use of these forms we excluded all items or bits that occurred with a frequency inappro-

priate for meaningful tetrachoric correlations, and in our study of the inter-correlations among the items we discarded all items that did not show more significant positive correlations than would have been expected on the basis of chance. In order to make our cluster scores as definitive and unambiguous as possible, we used only those items that showed positive interrelationships.

Although our principal analyses were based on the sample of younger children, all the analyses were replicated by the use of a sample of older children. It is interesting to note that the clusters found for the sample of younger children are not always similar to those for the sample of older children. In addition, clusters emerge which are appropriate for the description of the older children but are not appropriate for the description of the younger children. This change in the content of descriptive cluster scores is

most apparent in the summary provided by Table 39.

Apparently the Social Reaction Interview may be appropriate enough for learning about some of the attitudes of preschool children. It is obvious that this device yields very little for the older children. In view of the tendency, emphasized in the child's school experience, to present one's attitudes in the best light, this result is not surprising. Table 39 also indicates certain differences between the behavior of older and younger children as reported by their mothers. This is seen to be a reasonable trend and is in keeping with commonly observed differences between children of these ages. Commensurate with the differences in children, there are also differences in the child-rearing practices of the parents. Some of the patterns of child-rearing practices that are apparent in the families' reaction to preschool children are

TABLE 39
CLUSTERS FOR YOUNGER AND OLDER SAMPLES, WITH SPLIT-HALF RELIABILITIES

<i>Younger Sample</i>		<i>Older Sample</i>
	Social Reaction Interview	
Dependence on adults	.88	Goody-goody .59
Aggression	.58	Responsible attitude .52
Socialized compliance	.70	Cooperation with authority .41
Taking on adult role	.69	
Weakness-avoidance	.57	
Constructive approach	.58	
	Child-Rearing Practices Interview (Child)	
Compulsive	.52	Aggressive .64
Aggressive	.70	Anxiety .56
Phobic	.57	Spoiled child .78
Dependence	.71	Control .78
Suppression of aggression	.36	Dependence .60
	Child-Rearing Practices Interview (Home)	
Eagerness	.57	Overcontrolling .32
Unsympathetic parent	.44	Severe toilet training .45
Severe toilet training	.44	Punishment for aggression .82
Punishment for aggression	.78	Unsympathetic parent .33
	Conditions of Child-Rearing Interview (and Others)	
Ambition	.78	Ambition .77
Harmonious family relationships	.58	Harmonious family relationships .60
No ambition	.72	No ambition .74
Rejection	.76	Rejection .68
Incompatibility	.73	Incompatibility .52
Overprotectiveness	.77	

obscured or absent in the families' reaction to the older children.

It will be noted that the material descriptive of the home per se, i.e., the facilities of the home and its values and activities, has an appreciable uniformity of structure for the two age groups. This is reasonable enough inasmuch as these scores (Conditions of Child Rearing) are not oriented about the child primarily, but are oriented about the home in general and the parents in particular.

In Table 39 it will be seen that many of our cluster scores have an odd-even reliability that is encouragingly high. It is quite possible that this approach, with some refinements, could result in interviewing procedures which yield quantifiable material comparable with the material gathered by testing devices.

It should be noted that the mother's information descriptive of the child and the mother's information descriptive of the home have a common and immediate source, and one could fear that some pattern of interrelationships between such variables could emerge primarily as a result of the common source. Fortunately, information indicative of rejective features of the home was gathered by both the psychologist and the social worker at different times and in different settings. We find an appreciable consistency between these two sources of information. Specifically various aspects of the child's behavior revealed by cluster scores emerging from the interview with the mother showed the same kind of relationships with the rejective information whether it comes from the social worker's visit or whether it comes from the psychologist's interview. It is obvious,

therefore, that characteristics of the child as described by the mother and characteristics of the home do not have to have the mother as a common source of information in order for them to be inter-related.

From the beginning, we were aware that some of our information descriptive of the children and descriptive of the home could show a spurious evidence of relationship because in some instances they were recorded by the same interviewer. In order to minimize such a possible source of bias, the interviewers never knew the general nature of the scores that were to emerge from our analysis of the data, nor could they have known the manner in which the various items would contribute to the various scores.

In conclusion, our report indicates that one need not abandon hope of a quantitative approach to the study of human behavior merely because no standard measuring instruments are appropriate to the content of the investigation contemplated. It would appear that if one has means of securing the relevant informational content in standard form, one may use this content as a basis for a quantitative procedure, and accordingly, may enjoy the benefits of meaningful variables relevant to the desired content and possessing sufficient reliability to permit one to discover the nature of the most important relationships among the variables. After the nature of the most important relationships is discovered, one may or may not desire to perfect the measuring devices in such a way as to determine the exact degree of relationship.

APPENDIX A

SOCIAL REACTION INTERVIEW

DIRECTIONS: Ask the child the question and indicate which of the listed responses his answer most resembles. If his response is not listed, write it under "remarks." For the term "child" substitute "boy" or "girl" according to the sex of the interviewee.

INSTRUCTIONS: Let's play a game of pretending. I'll tell you what's happened and you tell me all the things you would do.

Dependency

1. Let's pretend you just got up in the morning and want to get dressed, what do you do?
 - a. Dress self.
 - b. Tell adult.
 - c. Ask what to wear.
 - d. Wait.
 - e. Get washed.
 - f. Remarks—
2. Let's pretend you are playing with your coat on and get too warm, what would you do?
 - a. Take off your coat.
 - b. Tell an adult that you are warm.
 - c. Ask permission to take off the coat.
 - d. Keep on playing.
 - e. Remarks—
3. Let's pretend your mother asked you to take a bath by yourself, what would you do?
 - a. Go ahead and take a bath.
 - b. Ask her to help you.
 - c. Tell her you don't need one.
 - d. Wait for parent's help.
 - e. Say that you can't.
 - f. Inquire or acquire bath toys.
 - g. Remarks—
4. When you get your meat for supper, what do you do about cutting it?
 - a. Cut it.
 - b. Ask to have it cut.
 - c. Ask for something else.
 - d. Refuse it.
 - e. Remarks—
5. Suppose you get hungry between meals, what do you do?
 - a. Get something.
 - b. Tell an adult.
 - c. Nothing.
 - d. Go to friends.
 - e. Eat.
 - f. Remarks—
6. Suppose you were playing and your toy broke, what would you do?
 - a. Try to, or fix it.
 - b. Ask for help to fix it.
 - c. Get another toy.
 - d. Tell an adult.
 - e. Stop playing.
 - f. Remarks—
7. Suppose you're playing with a friend and he has to leave, what do you do?
 - a. Keep on playing.
 - b. Stop playing.
 - c. Ask him to stay.
 - d. Look for another friend or activity.
 - e. Ask him whether he will return.
 - f. Say goodbye.
 - g. Remarks—
8. Suppose you fell down and hurt yourself, what would you do?
 - a. Forget about it.
 - b. Cry.
 - c. Tell an adult.
 - d. Wash it off, bandage.
 - e. Remarks—
9. When you have to go to the bathroom what do you do?
 - a. Go.
 - b. Tell an adult.
 - c. Wait.
 - d. Soils self.
 - e. Preparatory behavior.
 - f. Remarks—
10. When you're finished on the toilet, what do you do?
 - a. Completes toilet activities alone.
 - b. Request assistance
 - c. I tell or show mother.
 - d. Remarks—

11. Suppose your mother asked you to go to the store for her, what would you do?
- | | |
|---|---|
| a. Go. | myself. |
| b. Ask for company. | e. Statement of inability to go to store alone. |
| c. Say "no." | f. Do something else. |
| d. Ask to be permitted to get something for | g. Remarks— |
12. Suppose your mother has to go away for awhile, what would you do?
- | | |
|--|------------------------|
| a. Stay with another adult. | e. Say goodbye. |
| b. I'd want to go also. | f. I'd stay by myself. |
| c. Ask her for a present when she returns. | g. I'd wait for her. |
| d. Say I don't want her to go. | h. Remarks— |

Aggression

1. Suppose you wanted your friend's toy, what would you do?
- | | |
|----------------------|-----------------------------|
| a. Take it forcibly. | d. Give him mine. |
| b. Tell an adult. | e. Take it surreptitiously. |
| c. Ask him. | f. Remarks— |
2. If a child won't let you play with his toys, what would you do?
- | | |
|----------------------------------|--|
| a. Hit him. | f. Offer to let him play with my toys. |
| b. Play with them anyway. | g. Play with own toys. |
| c. Don't let him play with mine. | h. Don't play with him. |
| d. Say he's selfish. | i. Remarks— |
| e. Tell an adult. | |
3. Suppose your father promised to take you to the circus and then didn't, what would you do?
- | | |
|-------------------------------|-------------------|
| a. Remind him of his promise. | e. Go anyway. |
| b. Cry. | f. I wouldn't go. |
| c. Play with toys or friends. | g. Remarks— |
| d. Tell mother. | |
4. Suppose you wanted ice cream and your mother said you couldn't have it, what would you do?
- | | |
|-------------------------------------|------------------------|
| a. Tell her I want it. | e. I'd get it anyway. |
| b. Ask for candy, bread and butter. | f. I wouldn't have it. |
| c. Ask father. | g. Remarks— |
| d. Do or say something angry. | |
5. Suppose a child visited at your house. Everybody played with the child and nobody played with you, what would you do?
- | | |
|--------------------|----------------------------|
| a. Play by myself. | e. I'd go to my mother. |
| b. Cry. | f. Tell child to leave. |
| c. Go away. | g. Make bid for attention. |
| d. Hit the child. | h. Remarks— |
6. Suppose a child hits you on purpose, what would you do?
- | | |
|-----------------------------|---|
| a. Hit him back. | e. Go away from him. |
| b. Tell an adult. | f. Give him what he wants, try to please him. |
| c. Cry. | g. Remarks— |
| d. Tell him not to hit you. | |
7. Suppose a child takes a toy of yours that you don't want him to have, what would you do?
- | | |
|------------------------------|---------------------------|
| a. Hit him. | e. Take something of his. |
| b. Tell an adult. | f. Let him have it. |
| c. Take it back. | g. Remarks— |
| d. Tell him to give it back. | |
8. If another child calls you a bad name, what would you do?
- | | |
|------------------------------|------------------------------|
| a. Hit him. | e. I'd say I'm not bad. |
| b. Tell an adult. | f. I wouldn't play with him. |
| c. Say something bad to him. | g. Remarks— |
| d. Pay no attention to it. | |

Submission

1. When your mother tells you to eat something you don't like, what do you do?
 - a. Don't eat it.
 - b. Eat it.
 - c. Eat a little bit of it but no more.
 - d. Tell her how horrible it is.
 - e. Ask for something else.
 - f. Ask to leave.
 - g. Tell her to eat it.
 - h. Throw it on the floor.
 - i. Remarks—
2. When your mother says that she thinks you need to go to the bathroom, what do you do?
 - a. Go.
 - b. Go and try.
 - c. Say I don't need to.
 - d. Go to the bathroom but not do anything.
 - e. Leave the room where she is.
 - f. Do nothing.
 - g. Remarks—
3. When you're outside and your mother tells you to come in the house, what do you do?
 - a. Go in.
 - b. Say "no."
 - c. Say "wait a minute."
 - d. Ask to stay out longer.
 - e. Keep on playing.
 - f. Remarks—
4. When your mother tells you it's time to go to bed, what do you do?
 - a. Go to bed.
 - b. Ask if you can wait a while first.
 - c. I don't go to bed.
 - d. Go to your room and play.
 - e. Say you don't want to go to bed—it's early.
 - f. Remarks—
5. Suppose your mother tells you to let some other child play with a toy you are playing with, what do you do?
 - a. Say no, or say it's mine.
 - b. Give it to him.
 - c. Give it to him begrudgingly or with resentment.
 - d. Say after a while.
 - e. Say why you don't want that child to have it.
 - f. Let the child have it and then take the toy back.
 - g. Get something else for the child.
 - h. Remarks—
6. If your mother asks you to pick up your toys, what would you do?
 - a. Do it.
 - b. Do part of it.
 - c. Say that you can't.
 - d. Ask her to help you.
 - e. Tell her to do it.
 - f. Say that it's not your job.
 - g. Tell her that you didn't mess it up.
 - h. Say no.
 - i. Remarks—
7. Suppose you and your friends were playing on a swing and your friends said your turn was to go last, what would you do?
 - a. Go last.
 - b. Tell them I wanted to go earlier.
 - c. I'd play with something else.
 - d. Tell adult.
 - e. I wouldn't play with them.
 - f. I wouldn't go last.
 - g. I'd break the swing.
 - h. I'd hit them.
 - i. Remarks—
8. Suppose your mother says you can't play with someone you like, what do you do?
 - a. I do anyway.
 - b. Ask her why.
 - c. I wouldn't play with him.
 - d. I'd play with him when she wouldn't know.
 - e. I'd be angry with mother.
 - f. Cry.
 - g. Get another friend.
 - h. Remarks—
9. Suppose other children are playing and say you can't play with them, what would you do?
 - a. I wouldn't play with them.
 - b. Cry.
 - c. Play with someone else.
 - d. Tell an adult.
 - e. Play alone.
 - f. Ask why.
 - g. I'd offer them something.
 - h. Hit them.
 - i. Remarks—

Sympathy

1. Suppose you see a child fall down and hurt himself, what would you do?
 - a. Laugh.
 - b. Push him down again.
 - c. Ask him if it hurts.
 - d. Tell an adult.
 - e. Do nothing.
 - f. Help him.
 - g. Remarks—
2. Suppose you see a child get spanked, what do you do?
 - a. Laugh.
 - b. Say it served him right.
 - c. Ask him why he got spanked.
 - d. Feel very sorry that he's spanked.
 - e. Avoid the person doing the spanking.
 - f. Avoid watching or seeing the situation.
 - g. I don't know; I wouldn't do anything.
 - h. Remarks—
3. If you saw some children hitting a boy, what would you do?
 - a. Hit him too.
 - b. Laugh.
 - c. Watch the other children hit him.
 - d. Ask why they're hitting him.
 - e. Tell them not to hit him.
 - f. Hit the children.
 - g. Run away.
 - h. Tell an adult.
 - i. Remarks—
4. If you saw a little child who was crying, what would you do?
 - a. Pay no attention to him.
 - b. Tell him to go home.
 - c. Ask him what the trouble was.
 - d. Tell an adult.
 - e. Help the child.
 - f. I don't know; I wouldn't do anything.
 - g. Remarks—
5. If you had some candy and your friend didn't, what would you do?
 - a. Give him some of mine.
 - b. Tell him that he can't have any of mine.
 - c. Tell him to go get some for himself.
 - d. Tell him that he shouldn't have candy.
 - e. Get some for him.
 - f. Do nothing.
 - g. Don't let him know you have candy.
 - h. Remarks—
6. If a child breaks his toy, what do you do?
 - a. Laugh.
 - b. Don't let him play with my toys.
 - c. Let him play with one of your toys.
 - d. Tell an adult.
 - e. Tell him not to worry, that he'll get a new one.
 - f. Do nothing.
 - g. Try to fix it or buy him another.
 - h. Remarks—
7. If your mother was sick and went to bed, what would you do?
 - a. Laugh.
 - b. Tell her to get up.
 - c. Pay no attention to her or play.
 - d. Tell her it serves her right.
 - e. Ask her if it hurts.
 - f. Ask her if you could help her.
 - g. Tell an adult.
 - h. Assist, or be quiet.
 - i. I'd take care of myself.
 - j. Remarks—
8. Suppose you saw a little bird that was hurt and couldn't fly, what would you do?
 - a. Leave it. Do nothing. I don't know.
 - b. Tell an adult.
 - c. Take it home.
 - d. Kill it.
 - e. Give it physical care.
 - f. Curious.
 - g. Remarks—

*Strictness of Training**A. Cleanliness*

1. Suppose one of your friends said "let's make mud pies," what would you do?
 - a. Join him.
 - b. Join him, but with caution.
 - c. Tell him it's too dirty.
 - d. Say no.
 - e. Ask my mother.
 - f. Watch play in the mud pies.
 - g. Remarks—

2. Suppose you were eating ice cream and it dripped on your clothes, what would you do?
 - a. Change clothes.
 - b. Clean it off.
 - c. Tell an adult.
 - d. Keep on eating.
 - e. Ask for more ice cream.
 - f. Look at it.
 - g. Remarks—
3. Suppose you were playing ball and your ball fell in a garbage can, what would you do?
 - a. Get it out.
 - b. Tell an adult.
 - c. Get another ball.
 - d. Stop playing.
 - e. Leave it there.
 - f. Get it out with device or covering.
 - g. Remarks—

B. Sex

1. Suppose you saw a little girl pulling up her dress, what would you do?
 - a. Tell her to pull it down.
 - b. Tell an adult.
 - c. Cry "Shame on you."
 - d. Laugh.
 - e. Look at her.
 - f. Avoid her.
 - g. Ask her what she's doing.
 - h. Nothing. I don't know.
 - i. Tell her it isn't right.
 - j. Remarks—
2. Suppose a little boy pulled down his pants in front of you, what would you do?
 - a. Tell him to pull them up.
 - b. Tell an adult.
 - c. Tell him it isn't right.
 - d. Say "Shame on you."
 - e. Laugh.
 - f. Look at him.
 - g. Avoid him.
 - h. Ask him what he is doing.
 - i. Nothing. I don't know.
 - j. Hit him.
 - k. Remarks—

C. Toilet

1. Suppose a little boy or girl wet their pants, what would you do?
 - a. Laugh.
 - b. Say "Shame on you."
 - c. Tell adult.
 - d. Feel sorry.
 - e. Say you shouldn't do that.
 - f. Avoid him.
 - g. Nothing. I don't know.
 - h. Remarks—

D. Nudity

1. Suppose you wanted to ask your mother (or father) something and she was taking a bath, what would you do?
 - a. Ask her.
 - b. Ask her later.
 - c. Get in tub too.
 - d. Help her.
 - e. Go away.
 - f. Ask permission to enter.
 - g. Remarks—

Ethics

1. Suppose you broke something of your mother's that she liked a lot, what would you do?
 - a. Tell her.
 - b. Replace it or fix it.
 - c. Hide pieces.
 - d. Hide self.
 - e. Cry or feel bad.
 - f. Not tell her.
 - g. Solicit aid.
 - h. Apologize.
 - i. Remarks—
2. Suppose you wanted a nickel and you saw your mother's pocketbook lying on the table, what would you do?
 - a. Leave it there.
 - b. Take it.
 - c. Take it and tell her.
 - d. Ask for money.
 - e. I'd use my own money.
 - f. Remarks—

3. Suppose you found a ball that you knew belonged to a friend of yours, what would you do?

a. Return it.	e. Tell the friend.
b. Keep it.	f. Leave it there.
c. Hide it.	g. Remarks—
d. Tell an adult.	
4. Suppose you were playing ball and broke a window, what would you do?

a. Run away.	d. Apologize.
b. Tell an adult.	e. Replace it.
c. Not tell an adult.	f. Remarks—
5. Suppose you ate part of your dinner. There was some left but you aren't hungry any more, what would you do?

a. Eat it anyway.	e. Leave table.
b. Tell an adult I'm not hungry.	f. Cry.
c. Leave it.	g. Hide it.
d. Give it to pet.	h. Remarks—

Miscellaneous

1. What do you think children like you hate the most?

a. Dark.	f. Food.
b. Animals and insects.	g. Father.
c. Specific playmates.	h. Mother.
d. Children.	i. Me.
e. Toy.	j. Remarks—
2. What do you think children like you are afraid of?

a. Supernatural beings.	f. Getting lost.
b. Older child.	g. Animals and insects.
c. Automobiles.	h. Punitive agents, police, gypsies.
d. Being bad.	i. Me.
e. Being kidnapped.	j. Remarks—
3. Suppose you could be a baby again, how would you feel?

a. I wouldn't like it.	e. I'd feel sick.
b. Mother would take care of me.	f. I'd like it.
c. I'd be in a crib all day.	g. Remarks—
d. I'd drink milk, eat different foods.	
4. Suppose you could be a grown-up right away, how would you feel?

a. I'd be glad.	e. Rejection of adult responsibility.
b. I wouldn't want to because of school or other activities first.	f. I'd rather be small.
c. I'd have children.	g. I'd have adult authority and independence.
d. I'd be [some adult occupation].	h. I'd have adult possessions.
	i. Remarks—
5. What person do you think you are most like?

a. Mother.	e. Friend.
b. Father.	f. Another adult.
c. Sibling.	g. Myself.
d. Cowboy hero.	h. Remarks—
6. Suppose you could have a wish come true, what would you wish?

a. Food.	f. Good time.
b. Toys, clothes, pets, etc.	g. Didn't have to go to school.
c. Siblings.	h. Alternate sex.
d. More affection and security.	i. Athletic hero.
e. Less punishment.	j. Remarks—

APPENDIX B

CHILD-REARING PRACTICES INTERVIEW WITH THE MOTHER

Presentation of the Interviewer: Ask the questions at the top of each of the following sections. Try to maintain a spontaneous flow of description and remarks from the mother. Check answers to any of the questions as relevant data appear in her conversation. Do not ask specific questions and do not attempt to direct the mother's remarks by any show of preferential interest. Before each main topic of the interview is completed guide the conversation toward the questions she has not answered.

Presentation to the Mother: People aren't sure about what is best in bringing up children. We don't even know what mothers in general actually do in handling their children. As you know we are talking with a large number of mothers about this and we hope we can be more sure of these things when we are finished.

FEEDING

Take the problem of feeding, what happened with _____ feeding and eating?

A. Meeting Feeding Needs of Infant

Yes No

1. Was infant awakened for bottle feedings?
2. Was hungry infant required to wait for a scheduled bottle feeding?
3. Was infant unable to take milk easily?

B. Meeting Feeding Needs of Child

1. Has child disliked any foods so that he won't eat them?
2. May child eat as much as he wants at mealtimes?
3. Does child eat between meals?
4. Has child shown a desire for a specific food to the exclusion of other foods?
5. Does child vomit easily?
6. Has child been markedly overweight?
7. Has child been markedly underweight?

C. Nutritional Practices With Child

1. Does child consume a quart of milk a day?
2. Does child have fruit or fruit juice once a day?
3. Does child have an egg every day?
4. Does child have a leafy vegetable once a day?
5. Does child have fresh meat daily?
6. Has child had Vitamin D (or sun lamp) regularly through winter season?
7. Has child had tonics or other supplementary vitamins?

D. Emotional Factors at Feeding Time

1. When the child doesn't eat something the parents usually:
 - _____ a. Ignore it.
 - _____ b. Encourage child to eat.
 - _____ c. Coerce the child to eat.
2. Does child eat with other members of the family?
3. Has child cried in connection with mealtimes?
4. At what age was last bottle discontinued?
5. Did child want bottle at time it was discontinued?

INDEPENDENCE

We don't know enough about what five year olds can do for themselves and what are some of the things they don't do for themselves. Tell me about _____.

A. Expression of Independence

Yes No

1. Does child usually wash his face (except for atypical circumstances such as fatigue, special occasions, etc.)?
2. Does child usually wash his hands?

3. Does child usually wash his teeth?
4. Does child usually bathe alone?
5. Does child usually wash his hair?
6. Does child usually dress himself?
7. Does child play outdoors without adult supervision?
8. Does child perform chores or help around the house?
9. Does child refuse help from parents for things he knows how to do?

B. *Expression of Dependence*

1. Does child often request help for a task he has formerly accomplished or probably can do alone?
2. Does child without obvious provocation or difficulty often demand attention or affection (by whining or wanting to be embraced and babied)?
3. Does child go to parents for comfort or support because of minor accident or difficulty (other than quarrels)?
4. Does child go to parents about quarrels with children?
5. When the child has a quarrel with a playmate, does the parent intervene?

C. *Severity of Training For Independence*

1. When the child is in pain:
 - _____ a. He is soothed or reassured.
 - _____ b. His pain is ignored.
 - _____ c. He is reproved for the expression of pain.
2. When the child is lonely or afraid:
 - _____ a. He is soothed or reassured.
 - _____ b. His feelings are ignored.
 - _____ c. He is reproved for the expression of fear or loneliness.
3. When the child makes errors in tasks he has done:
 - _____ a. He is reassured or aided.
 - _____ b. His errors are ignored.
 - _____ c. He is reproved for his errors.

D. *Safety Training*

- _____ a. Child is repeatedly warned to avoid harmful situations.
- _____ b. Child is occasionally taught to avoid harmful situations.
- _____ c. Child is not taught to avoid many harmful situations.

TOILET TRAINING

Another part of bringing up children is training them to use the bathroom. Tell me about

A. *Initiation of Training*

Yes No

1. Was the time for the child's bowel movements predictable?
2. At what age was child first placed on the toilet?
3. How many times a day was the child put there?
4. How long did the child remain?
5. Did the child use the toilet during the early placements?
6. Did child scream or cry at the beginning of training?
7. After training was started did the mother stop and begin again later?

B. *Severity of Training*

1. At what age did child have all bowel movements in the bathroom?
2. At what age was child usually dry all day?
3. At what age could child usually go through the night without wetting or being picked up?
4. At what age did child go to inappropriate part of house for bowel movements or urination?
5. Does child ever sporadically wet during the day?
6. Does child ever sporadically wet during the night?
7. Was child scolded for soiling?

8. Was child ridiculed for soiling?
9. Was child hit for soiling?
10. Was child talked to constructively about soiling?
11. Did child have to wear soiled clothes as punishment?
12. Did child have to smell or contact soiled clothes?
13. Has child often gone more than one day without a bowel movement?
14. Has child had diarrhea?
15. Has child cried or been fearful after soiling during the day?
16. Has child cried or been fearful after soiling at night?
17. Does an adult reassure, quiet or comfort child after soiling?

C. Interest of Mother

1. During early training did the mother stay with the child in the bathroom?
2. Does the mother now stay with child?
3. Does the mother look at the child's stool?
4. Does the child routinely tell the mother when he has had a bowel movement?
5. Were child's messes disgusting to the mother?

AGGRESSION

We believe that it's perfectly natural for young children to get mad easily. What sort of situations seem to make _____ angry? How does it work out? What do you and your husband try to do?

A. Expression of Aggression

Yes No

Mother

When he is angry at the mother:

1. Does he try to strike her?
2. Does he scold her, call her unpleasant names?
3. Does the child leave the room, sulk, or become silent?
4. Does he cry?
5. Does he hold his breath, scream, roll on the floor, etc.?
6. Does he break objects or do other spiteful things?
7. Does he try to control himself?

When the child is angry with the mother does the mother:

8. Give in to the child's wishes?
9. Separate herself from the child?
10. Try to divert the child's interest?

When the mother scolds or punishes him:

11. Does he try to defend himself by explaining his circumstances?
12. Does he try to defend himself by counter-accusations?
13. Does he spontaneously promise better behavior?
14. Does he apologize?
15. Does he offer or agree to restitution or compensation?
16. Does he involve his father?

Father

When he is angry at the father:

1. Does he try to strike him?
2. Does he scold him and call him unpleasant names?
3. Does he leave the room, sulk, or become silent?
4. Does he hold his breath, scream, roll on the floor, etc.?
5. Does he cry?
6. Does he break objects or do other spiteful things.
7. Does he try to control himself?

When the child is angry at his father does the father:

8. Give in to the child's wishes?
9. Separate himself from the child?
10. Try to divert the child's interests?

When the father scolds or punishes him:

11. Does he try to defend himself by explaining his circumstances?
12. Does he try to defend himself by counter-accusations?
13. Does he spontaneously promise better behavior?
14. Does he apologize?
15. Does he offer or agree to restitution or compensation?
16. Does he involve the mother?

Yes No

Children

When he is angry at other children:

1. Does he strike them?
2. Does he scold them and call them unpleasant names?
3. Does he cry?
4. Does he leave, sulk, or become silent?
5. Does he scream, spit, or lose control?
6. Does he break objects or do other spiteful things?
7. Does he try to control himself?

B. Severity of Training

1. Is child usually spanked or hit for being aggressive toward the mother?
2. Is child usually scolded or reprimanded for being aggressive toward the mother?
3. Is child deprived of some privilege for being aggressive toward the mother?
4. Is child usually spanked or hit for being aggressive toward the father?
5. Is child usually scolded or reprimanded for being aggressive toward the father?
6. Is child deprived of some privilege for being aggressive toward the father?
7. Is child usually spanked or hit for being aggressive toward children?
8. Is child usually scolded or reprimanded for being aggressive toward children?
9. Is child deprived of some privilege for being aggressive toward children?
10. Do parents explain, interpret or reason with child about aggressive behavior?
11. Do parents ever encourage or compliment the child for aggressive behavior?
12. Does child rarely show anger toward mother?
13. Does child rarely show anger toward father?
14. Does child rarely show anger toward children?

CLEANLINESS

Some children don't seem to mind a little dirt and others don't like it at all but we don't know just how this goes. How is _____?

A. Permissiveness

Yes No

1. Were infant's or child's diapers changed immediately or very shortly after soiling?
2. Was child allowed to crawl on the ground or on a floor which might not have been clean at the time?
3. Did child play with feces?
4. Does the child go around indoors with soiled hands and clothes?
5. Does child remain clean for a prolonged period of time (all day Sunday, a long visit)?
6. When the child comes in from play, is he dirty?

B. Severity of Training

When the child gets dirty in dress or school clothes:

1. Is the child spanked?
2. Is the child scolded, reprimanded or ridiculed?
3. Does the mother clean him up without much comment?
4. Is he punished by having to wear the dirty clothes?
5. Is the activity prohibited?
6. Does the mother do nothing?

C. Assumption of Responsibility

1. Does child initiate washing procedures?
2. Does child help in cleaning up his room or toys?
3. Does child initiate a change to clean clothes?

D. Cleanliness Habits

1. The child is bathed
 - _____ a. every day
 - _____ b. two to three times a week
 - _____ c. one time a week or less.
2. The child's under clothes are changed
 - _____ a. every day
 - _____ b. two to three times a week
 - _____ c. one time a week or less.
3. The child's neck and ears are washed
 - _____ a. every day
 - _____ b. two to three times a week
 - _____ c. one time a week.
4. At what age did child use a fork properly?

SLEEPING

What about sleeping?

A. Isolation

Yes No

1. Has child usually slept in his own room?
2. Has child usually slept in room with parents?

B. Resistance to Sleep

1. Does child usually fall asleep readily?
2. Does child awaken upon such slight provocation as small noises?
3. Has child walked in sleep?
4. Has child talked in sleep?
5. Does child have nightmares?
6. Has child required non-nutritive objects (except the thumb) to suck in order to fall asleep?

C. Deviations

1. Is child afraid of the dark or of being alone in bed?
2. Has child repeatedly rocked in bed or crib before going to sleep?

D. Meeting Emotional Needs

1. Has child had pets or toys in bed?
2. Does parent comfort the child when he awakens during the night?
3. Is child kissed or "tucked in" bed?
4. Has child had a night light left on in his room or the hall?

SEX TRAINING

Although everyone feels that we should know more about the sexual reactions and curiosity of children, no one has bothered to find out what parents have noticed in their children. Would you mind telling me about _____?

A. Permitting Expression of Sexuality and Sex Curiosity

Yes No

1. Does the child know that babies are carried by a woman?
2. Does the child know a male is required for conception?
3. Has child frequently observed unclothed adults?
4. Has child frequently observed unclothed infants and children?
5. Has child ever participated in sexual examinations or play with another child?

B. Severity of Training

1. Has child been told sexuality can hurt or injure him?
2. Has child been told sexuality is pleasurable but for adults or for people in love?
3. Has child been told sexuality is a bad thing?
4. Has child been physically punished for sex behavior?
5. Has child been reprimanded for sex behavior?
6. Has child been told to avoid companions or adults because of sex behavior?

Conclusions: I think we've covered some of the most common aspects of child rearing. Are there any additional matters that have seemed important to you in the past or at present that we haven't talked about?

APPENDIX C

CHECK LIST OF CHILD'S NERVOUS MANNERISMS AND FEARS
(Child-Rearing Practices Interview with the mother)

- | | |
|-----------------------|---------------------|
| 1. Nail-biting | 9. Rituals |
| 2. Nose-picking | 10. Other |
| 3. Hair-pulling | 11. Fear of injury |
| 4. Tics | 12. Fear of water |
| 5. Thumb-sucking | 13. Fear of fire |
| 6. Masturbation | 14. Fear of animals |
| 7. Head-banging | 15. Fear of doctors |
| 8. Rubbing body parts | 16. Other fears |

APPENDIX D**CONDITIONS OF CHILD REARING**

(Continued from the Child-Rearing Practices Interview with the Mother)

1. *Physical Similarity*
 - a. One parent and child are strikingly similar in appearance. They have the same hair, eye and skin coloring and also have the same general features and physique.
 - b. One parent and the child are somewhat similar in appearance. There is about the same similarity and discrepancy in appearance as occurs among kin. There are no striking differences, however.
 - c. The child's appearance is strikingly different in some respect from that of both adoptive parents. Features, physique or coloring may be obviously different.
2. *Evidence of Interest in Child Care*
 - a. Full time boarding or caring for child by relative or friend.
 - b. Part time—day care, nursery school, baby-sitting.
 - c. None.
3. *Health of Adoptive Mother Since Adoption*
 - a. Mother has rarely been ill.
 - b. Mother has had illnesses, necessitating going to bed or missing work.
 - c. Mother has had one or more illnesses necessitating hospitalization.
 - d. Mother has died.
4. *Health of Adoptive Father Since Adoption*
 - a. Father has rarely been ill.
 - b. Father has had illnesses, necessitating going to bed or missing work.
 - c. Father has had one or more illnesses necessitating surgery.
 - d. Father has died.

5. *Parental Contacts*

- a. Parents spend most evenings on leisure activities together.
- b. Parents spend some of their evenings together and pursue some leisure time activities together.
- c. Parents rarely spend evenings on leisure activities together.

6. *Mother-Child Contact*

- a. Mother plans all her daytime activities so as to include the child. She usually does not work, has few activities outside the home, and spends most of the day with the child.
- b. Mother plans some activities to include the child, but may work part time or be active in a few groups so that she is not with the child all of its day.
- c. Mother plans most of her activities in a way which excludes the child. She may work all day or devote her time to pursuits outside the home. Except for details of child's routine, she is rarely with the child.

7. *Father-Child Contact*

- a. Father plans all of his leisure time activities so as to include the child.
- b. Father plans some of his activities so as to include the child but may have some other interests which exclude him.
- c. Father plans his activities so that he spends almost all of his time away from the child.

8. *Community Service*

- a. At least one parent is very active in community service. Parent may hold office in civic organizations or work repeatedly for community projects without pay.
- b. At least one parent is moderately active in community service. Parent may attend civic organization meetings, contribute services to drives, and occasionally work for community projects.
- c. Both parents are usually inactive in community affairs.

9. *Emotionality of Mother*

- a. When angry, mother usually expresses her feelings without restraint. She may scream, throw things, or lose control in a tantrum.
- b. When angry, mother expresses her feelings overtly but does not lose control.
- c. When angry, mother rarely expresses her feelings directly.

10. *Emotionality of Father*

- a. When angry, father usually expresses his feelings without restraint. He may scream, throw things, or lose control in a tantrum.
- b. When angry, father expresses his feelings overtly but does not lose control.
- c. When angry, father rarely expresses his feelings directly.

11. *Routine*

- a. The home routine is coordinated around a fixed and inflexible schedule.
- b. The home routine is organized around some fairly fixed schedule but there are minor variations.
- c. The home routine is organized around a slight schedule so that there are extensive and frequent variations in routine from day to day.

12. *Religion*

- a. There is consistent observance of all religious practices and prohibitions. The family is devout.
- b. There is moderate observance of some religious practices and prohibitions. The family attends church at least occasionally but some departure from religious teaching is found.
- c. Family is not interested in religion. They do not attend church and children are not educated in religion.

13. *Need Achievement*

- a. One or both parents strive to do some things as well as possible and in some respect are recognized in the community or considered to be outstanding.
- b. One or both parents strive to perform some things well but not outstandingly.
- c. Both parents are interested in expanding only as much effort as is required for satisfactory performance.

14. *Expressed Disapproval of Parents*
 - a. Parents criticize and find fault with minute or unimportant details of child's behavior.
 - b. Parents criticize only as realistically warranted by child's behavior.
 - c. Parents rarely criticize and may tend to overlook or excuse shortcomings.
15. *Story Telling*
 - a. Parent and child usually read a child's story or picture book together.
 - b. Parent reads a story book to child. The child does not attempt to look at the written text or the pictures.
 - c. Parent rarely reads child stories.
16. *Conversation Between Mother-Child*
 - a. Whenever mother and child are together, conversation is almost continuous with both participating.
 - b. There is a fair amount of conversation between mother and child, but the child initiates or does most of the talking.
 - c. The mother is not talkative and tends to discourage the child from chattering.
17. *Films*
 - a. Parents exclusively attend movies which have been acclaimed for their artistic or dramatic value.
 - b. Parents occasionally attend movies which have been acclaimed for their artistic or dramatic value.
 - c. Parents rarely or never attend movies which have been acclaimed for their artistic or dramatic value.
18. *Radio (Politics)*
 - a. Parents exclusively listen to forums, round tables, and news analysts on the radio.
 - b. Parents occasionally listen to forums, round tables, and news analysts on the radio.
 - c. Parents rarely or never listen to forums, round tables, and news analysts on the radio.
19. *Culture (Music)*
 - a. Parents, though they may listen to other music also, frequently listen to opera or classical music.
 - b. Parents almost exclusively listen to semi-classical music.
 - c. Parents almost exclusively listen to popular music.
20. *Culture (Art)*
 - a. Parents regularly attend art displays or collect art objects.
 - b. Parents occasionally attend art displays or collect art objects.
 - c. Parents neither attend art displays nor collect art objects.
21. *Culture (Literature)*
 - a. Parents, though they may read other things also, read classics, outstanding novels, biographies, history, or literary magazines.
 - b. Parents almost exclusively read book club selections and popular magazines.
 - c. Parents almost exclusively read mysteries, comics, westerns, adventures, and pulp magazines.
 - d. Parents read only the newspaper for recreation.
22. *Culture*
 - a. Parents frequently play musical instruments, paint, or sculpture.
 - b. Parents occasionally play musical instruments, paint, or sculpture.
 - c. Parents never play musical instruments, paint, or sculpture.

23. *Recreation*

Indicate how frequently one or both parents engage in the following:

Frequently or Regularly	Occasionally	Rarely or Never	
			1. Movies
			2. Radio
			3. Television
			4. Traveling away from home on pleasure trips
			5. Legitimate theater
			6. Cards, checkers, chess
			7. Pool and billiards
			8. Gardening
			9. Camping, fishing, hunting
			10. Dancing
			11. Collections of (non-art) objects
			12. Sailing and motor boating
			13. Golf
			14. Tennis, badminton, squash, handball
			15. Lectures
			16. Reading
			17. Playing football, baseball
			18. Horse races
			19. Other:

24. *Mother's Original Educational and Vocational Aspirations*

- Mother's original educational and vocational aspirations are markedly superior to her present life situation.
- Mother's original educational and vocational aspirations are slightly superior to her present life situation.
- Mother's original educational and vocational aspirations are in line with her present life situation.

25. *Father's Original Educational and Vocational Aspirations*

- Father's original educational and vocational aspirations are markedly superior to his present life situation.
- Father's original educational and vocational aspirations are slightly superior to his present life situation.
- Father's original educational and vocational aspirations are in line with his present life situation.

26. *Family Incompatibility*

- The parents have contemplated divorce or trial separation.
- There is evidence of deep incompatibility between parents but not sufficient to lead to a breakdown of the home.
- There are minor differences of interest and opinion between parents but they are basically compatible.
- The parents are harmonious and compatible.

APPENDIX E
MULTIPLE RATING SCALE

(A copy of this form is to be rated independently by both the
psychologist and social worker)

1. *Acceptance of Child*
 - a. Parents completely accept the adoptive child as their own. They note with pleasure physical or behavioral similarities between the child and members of the adoptive family.
 - b. Parents do not wholeheartedly accept the adoptive child as their own. They may observe a few faults of the child or respects with which he compares unfavorably with family.
 - c. Parents do not accept the adoptive child as their own. They regret the adoption and would, at one time, have liked to have annulled it if possible.
2. *Solicitousness Towards the Child*
 - a. Mother watches or fusses over child almost constantly. Is worried frequently and exaggerates the significance of minor ailments or difficulties.
 - b. Mother is concerned about the child's safety and health but trusts the child alone and allows him to take ordinary risks.
 - c. Mother is so unconcerned in major matters about the child's safety and health as to appear neglectful and irresponsible.
3. *Affectionateness of Mother*
 - a. Mother is overly affectionate with child. She kisses and fondles the child so frequently during the day that she probably interrupts the child's activities.
 - b. Mother is frequently affectionate with child. She will fondle and kiss him often but not to the extent of interfering with the child's activities.
 - c. Mother rarely fondles or kisses child.
4. *Acceleration Attempt*
 - a. Parent gives special training to child in order to assure his superiority with respect to other children.
 - b. Parent gives special training to child in order to assure his equality with other children.
 - c. Parent gives no special training to child in order to assure his equality with other children.
 - d. Parent exerts special measures to maintain immaturity of child by comparisons with other children.
5. *Flexibility of Parents' Expectations*
 - a. Parents have fixed and rigid ideas concerning child's education and vocation to which the child is expected to conform.
 - b. Parents have somewhat definite ideas concerning the child's education and vocation but do not insist that child conform.
 - c. Parents have no definite ideas concerning child's education and vocation.
6. *Mother's Enjoyment of Child*
 - a. The mother shows a great deal of real enjoyment and pleasure in most aspects of her child's behavior.
 - b. The mother shows some real enjoyment and pleasure in most aspects of her child's behavior.
 - c. The mother shows little real enjoyment and pleasure in most aspects of her child's behavior.
 - d. The mother shows no real enjoyment and pleasure in most aspects of her child's behavior.
7. *Mother's Reaction to Child*
 - a. Mother is critical of the child, describing his behavior in unfriendly and uncomplimentary ways.
 - b. The mother describes the child's behavior in an evaluative manner as if seeking to establish a value for herself.
 - c. The mother describes the child's behavior in an objective manner but accounts for it by favorable and protective explanations.
 - d. The mother is unable to recognize the child's behavior for what it is because of a marked protective bias.

APPENDIX F

RATING SCALE (HOME)

(Provided by the social worker)

1. *Physical Plant*

- a. Home is in every way sufficient for meeting the child's physical needs with respect to warmth, quiet, cleanliness, toilet facility, ventilation, sunlight, and freedom from vermin and hazards.
- b. Home is fairly sufficient for meeting physical needs (See a), but may be lacking in one or two respects.
- c. Home is lacking in many requisites for meeting physical needs of child.

2. *Outdoor Play Space*

- a. There is a large yard, lot, or park near the home where the child plays freely.
- b. There is a small lawn, back yard, court, or play street near the home where the child plays freely.
- c. There is little or no space outdoors where the child plays freely.

3. *Maintenance of Home*

- a. The exterior of the home and any surrounding ground are very well maintained, and there is evidence that considerable time and care has been invested.
- b. The exterior of the home and any surrounding ground are sufficiently well maintained that they appear tidy, but there is less time and care required for the upkeep.
- c. The exterior of the home and any surrounding ground are not well maintained.

4. *Ownership of Home*

- a. Parents own the house they live in.
- b. Parents rent the house they live in.
- c. Parents pay rent for a public type building, e.g. apartment house, hotel.

5. *Neatness*

- a. Home is meticulous with everything in place. There are no misplaced toys or equipment either inside or outside.
- b. The home is generally clean and neat but there is some disarray as if a few items had been recently in use.
- c. The home is characterized by disarray. There are evidences that the home has not been recently cleaned.

6. *Stability of Residence*

- a. One or both adoptive parents have lived in the present neighborhood or social group practically all their lives.
- b. One or both adoptive parents have lived in the present neighborhood or social group ten years or more.
- c. One or both adoptive parents have lived in the present neighborhood or social group five years or more.
- d. Both parents are relatively new to the community.

7. *Contacts with Other Children*

- a. Child has numerous playmates who are close in age (\pm one year) near the home.
- b. Child has one or two playmates near the home or siblings of approximately his age.
- c. Child has no other children or siblings of approximately his age near the home with whom he plays.

8. *Sociability (Visitors)*

- a. The family has guests (including relatives and friends) frequently.
- b. The family has guests (including relatives and friends) occasionally.
- c. The family rarely has guests.

9. *Family Group Recreation*

- a. Family enjoys group activities, e.g., they engage in family games, hobbies. They enjoy occasional excursions, picnics, carnivals, trips.

- b. Family sometimes engages in group activities but these participations are not usually wholly pleasurable. One of the family members may become upset or lose interest.
- c. Family enjoys group activities. They either do not engage in them or the activity frequently ends unpleasantly.

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